

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:57:26 ; Search time 108.69 Seconds
(without alignments)
343.269 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345
Perfect score: 597
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Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 3502263 seqs, 351980561 residues

Total number of hits satisfying chosen parameters: 3502263

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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7	597	100.0	323	1	PCT-US99-31025-29

8	597	100.0	323	18	US-09-468-647-1	Sequence 1, Appli
9	597	100.0	323	18	US-09-471-179-29	Sequence 29, Appli
10	597	100.0	323	22	US-09-869-198A-1	Sequence 1, Appli
11	597	100.0	339	1	PCT-US00-05918-776	Sequence 776, App
12	597	100.0	339	23	US-09-925-302-776	Sequence 776, App
13	597	100.0	345	1	PCT-US99-01574-2	Sequence 2, Appli
14	597	100.0	345	1	PCT-US99-15783-4	Sequence 4, Appli
15	597	100.0	345	1	PCT-US99-22668-3	Sequence 3, Appli
16	597	100.0	345	1	PCT-US99-31025-2	Sequence 2, Appli
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24	597	100.0	345	16	US-09-265-686-2	Sequence 2, Appli
25	597	100.0	345	16	US-09-267-213-2	Sequence 2, Appli
26	597	100.0	345	17	US-09-304-216-33	Sequence 33, Appli
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28	597	100.0	345	17	US-09-380-138-488	Sequence 488, App
29	597	100.0	345	18	US-09-410-349A-3	Sequence 3, Appli
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35	597	100.0	345	19	US-09-540-703-2	Sequence 2, Appli
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38	597	100.0	345	19	US-09-564-595A-33	Sequence 33, Appli
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40	597	100.0	345	19	US-09-599-596-2	Sequence 2, Appli
41	597	100.0	345	20	US-09-662-783-24	Sequence 24, Appli
42	597	100.0	345	20	US-09-685-330-24	Sequence 24, Appli
43	597	100.0	345	20	US-09-688-312-51	Sequence 51, Appli
44	597	100.0	345	20	US-09-691-200-32	Sequence 32, Appli
45	597	100.0	345	20	US-09-695-121-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1
US-09-468-647-29
; Sequence 29, Application US/09468647
; GENERAL INFORMATION:
; APPLICANT: Gordon, Robert D.
; APPLICANT: Sprengel, Jorg J.
; APPLICANT: Ion, Jeffrey R.
; APPLICANT: Dijkmans, Joslena J.H.
; APPLICANT: Goslowska, Anna
; APPLICANT: Dhanaraj, Sridevi N.
; APPLICANT: Xu, Jean
; TITLE OF INVENTION: Vascular Endothelial Growth Factor-X
; FILE REFERENCE: B0192/7011
; CURRENT APPLICATION NUMBER: US/09/468/647
; CURRENT FILING DATE: 1999-12-21
; PRIOR APPLICATION NUMBER: GB 9828377.3
; PRIOR FILING DATE: 1998-12-22
; PRIOR APPLICATION NUMBER: US 60/124,967
; PRIOR FILING DATE: 1999-03-18
; PRIOR APPLICATION NUMBER: US 60/164,131
; PRIOR FILING DATE: 1999-11-08
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 29
; LENGTH: 132
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-468-647-29

QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 106
Db 273 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 318

RESULT 5

US-09-852-209-5
; Sequence 5, Application US/09852209
; GENERAL INFORMATION:
; APPLICANT: ERIKSSON, Ulf
; APPLICANT: AASE, Karin
; APPLICANT: LEE, Xuri
; APPLICANT: PONTEN, Annica
; APPLICANT: UUTELA, Marko
; APPLICANT: ALITALO, Kari
; APPLICANT: OESTMAN, Arne
; APPLICANT: HELDIN, Carl-Henrik
; APPLICANT: BETSHOLTZ, Christer
; TITLE OF INVENTION: PLATELET-DERIVED GROWTH FACTOR C, DNA CODING
; FILE REFERENCE: 09-410349-Eriksson et al-1064-44740
; CURRENT APPLICATION NUMBER: US/09/852,209
; CURRENT FILING DATE: 2001-05-10
; PRIOR APPLICATION NUMBER: 09/410,349
; PRIOR FILING DATE: 1999-09-30
; PRIOR APPLICATION NUMBER: 60/110,749
; PRIOR FILING DATE: 1998-12-03
; PRIOR APPLICATION NUMBER: 60/113,002
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 60/135,426
; PRIOR FILING DATE: 1999-05-21
; PRIOR APPLICATION NUMBER: 60/144,022
; PRIOR FILING DATE: 1999-07-15
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 318
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-852-209-5

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Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 213 LTTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 272

QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 106
Db 273 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 318

RESULT 6

US-09-852-209A-5
; Sequence 5, Application US/09852209A
; GENERAL INFORMATION:
; APPLICANT: ERIKSSON, Ulf
; APPLICANT: AASE, Karin
; APPLICANT: LEE, Xuri
; APPLICANT: PONTEN, Annica
; APPLICANT: UUTELA, Marko
; APPLICANT: ALITALO, Kari
; APPLICANT: OESTMAN, Arne
; APPLICANT: HELDIN, Carl-Henrik
; APPLICANT: BETSHOLTZ, Christer
; TITLE OF INVENTION: PLATELET-DERIVED GROWTH FACTOR C, DNA CODING
; FILE REFERENCE: 09-410349-Eriksson et al-1064-44740
; CURRENT APPLICATION NUMBER: US/09/852,209A
; CURRENT FILING DATE: 2001-05-10

; PRIOR APPLICATION NUMBER: 09/410,349
; PRIOR FILING DATE: 1999-09-30
; PRIOR APPLICATION NUMBER: 60/110,749
; PRIOR FILING DATE: 1998-12-03
; PRIOR APPLICATION NUMBER: 60/113,002
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 60/135,426
; PRIOR FILING DATE: 1999-05-21
; PRIOR APPLICATION NUMBER: 60/144,022
; PRIOR FILING DATE: 1999-07-15
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 318
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-852-209A-5

Query Match 100.0%; Score 597; DB 22; Length 318;
Best Local Similarity 100.0%; Pred. No. 2.4e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LTTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
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QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 106
Db 273 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 318

RESULT 7

PCT-US99-31025-29
; Sequence 29, Application PC/TUS9931025
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceuticals, Inc.
; TITLE OF INVENTION: SECRETED PROTEINS AND NUCLEIC ACIDS
; FILE REFERENCE: 7853-173-228
; CURRENT APPLICATION NUMBER: PCT/US99/31025
; CURRENT FILING DATE: 1999-12-23
; EARLIER APPLICATION NUMBER: 09/223,546
; EARLIER FILING DATE: 1998-12-30
; NUMBER OF SEQ ID NOS: 135
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 29
; LENGTH: 323
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US99-31025-29

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QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 106
Db 278 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 323

RESULT 8

US-09-468-647-1
; Sequence 1, Application US/09468647
; GENERAL INFORMATION:
; APPLICANT: Gordon, Robert D.
; APPLICANT: Sprengel, Jorg J.
; APPLICANT: Yon, Jeffrey R.

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; APPLICANT: Gordon, Robert
; APPLICANT: Sprengel, Jorg
; APPLICANT: Von, Jeffrey
; APPLICANT: Dijkmans, Josiena
; APPLICANT: Gosiewska, Anna
; APPLICANT: Dhanaraj, Sridevi
; APPLICANT: Xu, Jean
; TITLE OF INVENTION: Vascular Endothelial Growth Factor-X
; FILE REFERENCE: 51935/004
; CURRENT APPLICATION NUMBER: US/09/869, 198A
; CURRENT FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: GB 9828377.3
; PRIOR FILING DATE: 1998-12-22
; PRIOR APPLICATION NUMBER: US 60/124, 967
; PRIOR FILING DATE: 1999-03-18
; PRIOR APPLICATION NUMBER: US 60/164,131
; PRIOR FILING DATE: 1999-11-08
; NUMBER OF SEQ ID NOS: 97
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 1
; LENGTH: 323
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-869-198A-1

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Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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61 KYTKYHEVLQRPRTGTVRGLHKSLTDVALEHHEECDCVCRSTGG 106
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278 KYTKYHEVLQRPRTGTVRGLHKSLTDVALEHHEECDCVCRSTGG 323
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RESULT 11
PCT-US00-05918-776
; Sequence 776, Application PC/TUS0005918
; GENERAL INFORMATION:
; APPLICANT: Craig Rosen,
; APPLICANT: Steve Ruben
; TITLE OF INVENTION: Human Lung Cancer Associated Gene Sequences and Polypeptides
; FILE REFERENCE: PA104PCT
; CURRENT APPLICATION NUMBER: PCT/US00/05918
; CURRENT FILING DATE: 2000-03-08
; EARLIER APPLICATION NUMBER: 60/124,270
; EARLIER FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 896
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 776
; LENGTH: 339
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US00-05918-776

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Dd	234	LLTEEVRLYSCTPRNFVSIREELKRTDTTFWPGCLLVKRCGGNCACCLHNCNECQCVP	293		
QY	61	KVTKKYHEVLQLRPKTGVRLGHLKSLTDVALEHHHEEDCVCGRGSTGG	106		
Dd	294	KVTWKYHEVLQLRPKTGVRLGHLKSLTDVALEHHHEEDCVCGRGSTGG	339		

QY	61	KVTRRYHEVLQLRPKPTGVRGLHKS	SLTDVALEHHEDCVCRGSTGG	106
pB	294	KVTKKYHEVLQLRPKPTGVRGLHKS	SLTDVALEHHEDCVCRGSTGG	339

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US-09-925-302-776
; Sequence 776, Application US/09925302
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA104
; CURRENT APPLICATION NUMBER: US/09/925,302
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05918
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 896
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 776
; LENGTH: 339
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-925-302-776

Query Match      100.0%; Score 597; DB 23; Length 339;
Best Local Similarity 100.0%; Pred. No. 2.6e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVLRYSCPTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
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Db 234 LITEEVLRYSCPTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 293

QY 61 KVTKKYHEVLQLRPKTGVRGLHKSLLTDVALEHHEECDCVCRGSGTG 106
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 294 KVTKKYHEVLQLRPKTGVRGLHKSLLTDVALEHHEECDCVCRGSGTG 339

RESULT 13
PCT-US99-01574-2
; Sequence 2, Application PC/TUS9901574A
; GENERAL INFORMATION:
; APPLICANT: Song, Ho Yeong
; APPLICANT: Na, Songqing
; APPLICANT: Dou, Shenshen
; TITLE OF INVENTION: VEGF Related Gene and Protein
; FILE REFERENCE: X-11851
; CURRENT APPLICATION NUMBER: PCT/US99/01574A
; CURRENT FILING DATE: 1999-01-26
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US99-01574-2

Query Match      100.0%; Score 597; DB 1; Length 345;
Best Local Similarity 100.0%; Pred. No. 2.6e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVLRYSCPTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
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Db 240 LITEEVLRYSCPTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 299

QY 61 KVTKKYHEVLQLRPKTGVRGLHKSLLTDVALEHHEECDCVCRGSGTG 106
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Db 300 KVTKKYHEVLQLRPKTGVRGLHKSLLTDVALEHHEECDCVCRGSGTG 345

RESULT 14
PCT-US99-15783-4
; Sequence 4, Application PC/TUS9915783
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
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Search completed: May 24, 2002, 10:00:56
Job time: 210 sec

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:57:46 ; Search time 10.89 Seconds
(without alignments)
275.547 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345
Perfect score: 597
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Total number of hits satisfying chosen parameters: 116914

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Post-processing: Minimum Match 0%
Maximum Match 100%
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	597	100.0	303	5 US-09-564-595D-57	Sequence 57, Appl
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5	597	100.0	345	5 US-09-978-681A-488	Sequence 488, Appl
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7	597	100.0	345	5 US-09-978-564A-488	Sequence 488, Appl
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25	597	100.0	345	6 US-10-121-058-286	Sequence 286, Appl
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30	597	100.0	345	6 US-10-123-156-286	Sequence 286, App
31	597	100.0	345	6 US-10-123-157-286	Sequence 286, App
32	597	100.0	345	6 US-10-123-212-286	Sequence 286, App
33	597	100.0	345	6 US-10-123-213-286	Sequence 286, App
34	597	100.0	345	6 US-10-123-109-286	Sequence 286, App
35	597	100.0	345	6 US-10-121-041-286	Sequence 286, App
36	597	100.0	345	6 US-10-121-045-286	Sequence 286, App
37	597	100.0	345	6 US-10-121-046-286	Sequence 286, App
38	597	100.0	345	6 US-10-121-051-286	Sequence 286, App
39	597	100.0	345	6 US-10-121-040-286	Sequence 286, App
40	597	100.0	345	6 US-10-121-048-286	Sequence 286, App
41	597	100.0	345	6 US-10-121-052-286	Sequence 286, App
42	597	100.0	345	6 US-10-121-061-286	Sequence 286, App
43	597	100.0	345	6 US-10-121-042-286	Sequence 286, App
44	597	100.0	345	6 US-10-121-055-286	Sequence 286, App
45	597	100.0	345	6 US-10-121-059-286	Sequence 286, App

ALIGNMENTS

RESULT 1

US-09-564-595D-57
; Sequence 57, Application US/09564595D
; GENERAL INFORMATION:
; APPLICANT: Gilbert, Teresa
; APPLICANT: Hart, Charles E.
; APPLICANT: Sheppard, Paul O.
; TITLE OF INVENTION: GROWTH FACTOR HOMOLOG ZVEGF4
; FILE REFERENCE: 99-19
; CURRENT APPLICATION NUMBER: US/09/564,595D
; CURRENT FILING DATE: 2000-05-03
; PRIOR APPLICATION NUMBER: US 09/304,216
; PRIOR FILING DATE: 1999-05-03
; PRIOR APPLICATION NUMBER: US 60/164,463
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: US 60/180,169
; PRIOR FILING DATE: 2000-02-04
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 57
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
US-09-564-595D-57

Query Match 100.0%; Score 597; DB 5; Length 303;
Best Local Similarity 100.0%; Pred. No. 1.2e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVLRYSCPTPRNFSVSIREELKRTDTIFWPGCLLVRCGNCACCLHNCOCVPS 60
DB 198 LITEEVLRYSCPTPRNFSVSIREELKRTDTIFWPGCLLVRCGNCACCLHNCOCVPS 257

QY 61 KYTKYHEVLQRLPKTGVRLHSLTDVALEHHECDVCVCRGSGTG 106
DB 258 KYTKYHEVLQRLPKTGVRLHSLTDVALEHHECDVCVCRGSGTG 303

RESULT 2

US-09-564-595D-56
; Sequence 56, Application US/09564595D
; GENERAL INFORMATION:
; APPLICANT: Gilbert, Teresa
; APPLICANT: Hart, Charles E.
; APPLICANT: Sheppard, Paul O.
; TITLE OF INVENTION: GROWTH FACTOR HOMOLOG ZVEGF4

```
; FILE REFERENCE: 99-19
; CURRENT APPLICATION NUMBER: US/09/564,595D
; CURRENT FILING DATE: 2000-05-03
; PRIOR APPLICATION NUMBER: US 09/304,216
; PRIOR FILING DATE: 1999-05-03
; PRIOR APPLICATION NUMBER: US 60/164,463
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: US 60/180,169
; PRIOR FILING DATE: 2000-02-04
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 56
; LENGTH: 317
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
; US-09-564-595D-56

Query Match          100.0%; Score 597; DB 5; Length 317;
Best Local Similarity 100.0%; Pred. No. 1.3e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LTTEVRLVSCPTPNFSVSIRELKRDTIFWPGCLLVKRCGNCACCLHNCNECQVPS 60
Db 212 LTTEVRLVSCPTPNFSVSIRELKRDTIFWPGCLLVKRCGNCACCLHNCNECQVPS 271

QY 61 KVTKKYHEVLQRPKTVGRLHKSLLTDVALEHHEEDCVCRGSTGG 106
Db 272 KVTKKYHEVLQRPKTVGRLHKSLLTDVALEHHEEDCVCRGSTGG 317

RESULT 3
; Sequence 488, Application US/09978403A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630FIC17
; CURRENT APPLICATION NUMBER: US/09/978,403A
; CURRENT FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/077450
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: 60/077632
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077641
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077649
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077791
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/078004
; PRIOR FILING DATE: 1998-03-13
; PRIOR APPLICATION NUMBER: 60/078886
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078939
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/079294
; PRIOR FILING DATE: 1998-03-25
; PRIOR APPLICATION NUMBER: 60/079656
; PRIOR FILING DATE: 1998-03-26
; PRIOR APPLICATION NUMBER: 60/079664
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079663
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079728
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079786
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079920
; PRIOR FILING DATE: 1998-03-30
; PRIOR APPLICATION NUMBER: 60/079923
; PRIOR FILING DATE: 1998-03-30
; PRIOR APPLICATION NUMBER: 60/080105
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/080107
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/080165
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/080194
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/080327
; PRIOR FILING DATE: 1998-04-01
; PRIOR APPLICATION NUMBER: 60/080328
; PRIOR FILING DATE: 1998-04-01
; PRIOR APPLICATION NUMBER: 60/080333
; PRIOR FILING DATE: 1998-04-01
; PRIOR APPLICATION NUMBER: 60/080334
; PRIOR FILING DATE: 1998-04-01
; PRIOR APPLICATION NUMBER: 60/081070
; PRIOR FILING DATE: 1998-04-08
; PRIOR APPLICATION NUMBER: 60/081049
; PRIOR FILING DATE: 1998-04-08
; PRIOR APPLICATION NUMBER: 60/081071
; PRIOR FILING DATE: 1998-04-08
; PRIOR APPLICATION NUMBER: 60/081195
; PRIOR FILING DATE: 1998-04-08
; PRIOR APPLICATION NUMBER: 60/081203
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081229
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081955
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;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/081817
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/081819
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/081952
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/081838
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/082568
;; PRIOR FILING DATE: 1998-04-21
;; PRIOR APPLICATION NUMBER: 60/082569
;; PRIOR FILING DATE: 1998-04-21
;; PRIOR APPLICATION NUMBER: 60/082704
;; PRIOR FILING DATE: 1998-04-22
;; PRIOR APPLICATION NUMBER: 60/082804
;; PRIOR FILING DATE: 1998-04-22
;; PRIOR APPLICATION NUMBER: 60/082700
;; PRIOR FILING DATE: 1998-04-22
;; PRIOR APPLICATION NUMBER: 60/082797
;; PRIOR FILING DATE: 1998-04-22
;; PRIOR APPLICATION NUMBER: 60/082796
;; PRIOR FILING DATE: 1998-04-23
;; PRIOR APPLICATION NUMBER: 60/083336
;; PRIOR FILING DATE: 1998-04-27
;; PRIOR APPLICATION NUMBER: 60/083322
;; PRIOR FILING DATE: 1998-04-28
;; PRIOR APPLICATION NUMBER: 60/083392
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083495
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083496
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083499
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083545
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083554
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083558
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083559
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083500
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083742
;; PRIOR FILING DATE: 1998-04-30
;; PRIOR APPLICATION NUMBER: 60/084366
;; PRIOR FILING DATE: 1998-05-05
;; PRIOR APPLICATION NUMBER: 60/084414
;; PRIOR FILING DATE: 1998-05-06
;; PRIOR APPLICATION NUMBER: 60/084441
;; PRIOR FILING DATE: 1998-05-06
;; PRIOR APPLICATION NUMBER: 60/084637
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084639
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084640
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084598
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084600
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084627
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084643
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/085339
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085338
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085323
;; PRIOR FILING DATE: 1998-05-13

;; PRIOR APPLICATION NUMBER: 60/085582
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085700
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085689
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085579
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085580
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085573
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085704
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085697
;; PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 5; Length 345;

Best Local Similarity 100.0%; Pred. No. 1.4e-53; Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LITEEVRLYSCTPRNFVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQVPS 60
|||||
Db 240 LITEEVRLYSCTPRNFVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQVPS 299
|||||
Qy 61 KVTKKYHEVLQRPKTGVRLHKLSTDLVALEHHEEDCVCRGSTGG 106
|||||
Db 300 KVTKKYHEVLQRPKTGVRLHKLSTDLVALEHHEEDCVCRGSTGG 345
|||||

RESULT 4

US-09-978-544A-488
; Sequence 488, Application US/09978544A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630PIC13
; CURRENT APPLICATION NUMBER: US/09/978,544A
; CURRENT FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311

1	PRIOR APPLICATION NUMBER: 60/08181191
2	PRIOR FILING DATE: 1998-04-15
3	PRIOR APPLICATION NUMBER: 60/081952
4	PRIOR FILING DATE: 1998-04-15
5	PRIOR APPLICATION NUMBER: 60/081838
6	PRIOR FILING DATE: 1998-04-15
7	PRIOR APPLICATION NUMBER: 60/082568
8	PRIOR FILING DATE: 1998-04-21
9	PRIOR APPLICATION NUMBER: 60/082569
10	PRIOR FILING DATE: 1998-04-21
11	PRIOR APPLICATION NUMBER: 60/082704
12	PRIOR FILING DATE: 1998-04-22
13	PRIOR APPLICATION NUMBER: 60/082804
14	PRIOR FILING DATE: 1998-04-22
15	PRIOR APPLICATION NUMBER: 60/082700
16	PRIOR FILING DATE: 1998-04-22
17	PRIOR APPLICATION NUMBER: 60/082797
18	PRIOR FILING DATE: 1998-04-22
19	PRIOR APPLICATION NUMBER: 60/082796
20	PRIOR FILING DATE: 1998-04-23
21	PRIOR APPLICATION NUMBER: 60/083336
22	PRIOR FILING DATE: 1998-04-27
23	PRIOR APPLICATION NUMBER: 60/083322
24	PRIOR FILING DATE: 1998-04-28
25	PRIOR APPLICATION NUMBER: 60/083392
26	PRIOR FILING DATE: 1998-04-29
27	PRIOR APPLICATION NUMBER: 60/083495
28	PRIOR FILING DATE: 1998-04-29
29	PRIOR APPLICATION NUMBER: 60/083496
30	PRIOR FILING DATE: 1998-04-29
31	PRIOR APPLICATION NUMBER: 60/083499
32	PRIOR FILING DATE: 1998-04-29
33	PRIOR APPLICATION NUMBER: 60/083545
34	PRIOR FILING DATE: 1998-04-29
35	PRIOR APPLICATION NUMBER: 60/083554
36	PRIOR FILING DATE: 1998-04-29
37	PRIOR APPLICATION NUMBER: 60/083558
38	PRIOR FILING DATE: 1998-04-29
39	PRIOR APPLICATION NUMBER: 60/083559
40	PRIOR FILING DATE: 1998-04-29
41	PRIOR APPLICATION NUMBER: 60/083500
42	PRIOR FILING DATE: 1998-04-29
43	PRIOR APPLICATION NUMBER: 60/083742
44	PRIOR FILING DATE: 1998-04-30
45	PRIOR APPLICATION NUMBER: 60/084366
46	PRIOR FILING DATE: 1998-05-05
47	PRIOR APPLICATION NUMBER: 60/084414
48	PRIOR FILING DATE: 1998-05-06
49	PRIOR APPLICATION NUMBER: 60/084441
50	PRIOR FILING DATE: 1998-05-06
51	PRIOR APPLICATION NUMBER: 60/084637
52	PRIOR FILING DATE: 1998-05-07
53	PRIOR APPLICATION NUMBER: 60/084639
54	PRIOR FILING DATE: 1998-05-07
55	PRIOR APPLICATION NUMBER: 60/084640
56	PRIOR FILING DATE: 1998-05-07
57	PRIOR APPLICATION NUMBER: 60/084627
58	PRIOR FILING DATE: 1998-05-07
59	PRIOR APPLICATION NUMBER: 60/084598
60	PRIOR FILING DATE: 1998-05-07
61	PRIOR APPLICATION NUMBER: 60/084643
62	PRIOR FILING DATE: 1998-05-07
63	PRIOR APPLICATION NUMBER: 60/085339
64	PRIOR FILING DATE: 1998-05-13
65	PRIOR APPLICATION NUMBER: 60/085338
66	PRIOR FILING DATE: 1998-05-13
67	PRIOR APPLICATION NUMBER: 60/085323
68	PRIOR FILING DATE: 1998-05-13
69	PRIOR APPLICATION NUMBER: 60/085582
70	PRIOR FILING DATE: 1998-05-15
71	PRIOR APPLICATION NUMBER: 60/085700

;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085689
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085579
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085580
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085573
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085704
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085697
;; PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 5; Length: 345;

Best Local Similarity 100.0%; Pred. No. 1.4e-53;

Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVRVLSCTPRNFSVIRELKRDTDFWPGCLLVKRCGNCACCLHNCNECQVPS 60

Db 240 LITEEVRVLSCTPRNFSVIRELKRDTDFWPGCLLVKRCGNCACCLHNCNECQVPS 299

QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEECDCVCRGSTGG 106

Db 300 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEECDCVCRGSTGG 345

RESULT 5

US-09-978-681A-488

; Sequence 488. Application US/09978681A

; GENERAL INFORMATION:

; APPLICANT: Ashkenazi, Avi

; APPLICANT: Baker Kevin P.

; APPLICANT: Botstein, David

; APPLICANT: Desnoyers, Luc

; APPLICANT: Eaton, Dan

; APPLICANT: Ferrara, Napoleon

; APPLICANT: Filvaroff, Ellen

; APPLICANT: Fong, Sherman

; APPLICANT: Gao, Wei-Qiang

; APPLICANT: Gerber, Hanspeter

; APPLICANT: Gertitsen, Mary E.

; APPLICANT: Goddard, Audrey

; APPLICANT: Godowski, Paul J.

; APPLICANT: Grimaldi, J. Christopher

; APPLICANT: Gurney, Austin L.

; APPLICANT: Hillan, Kenneth J.

; APPLICANT: Kljavin, Ivar J.

; APPLICANT: Kuo, Sophia S.

; APPLICANT: Napier, Mary A.

; APPLICANT: Pan, James;

; APPLICANT: Paoni, Nicholas F.

; APPLICANT: Roy, Margaret Ann

; APPLICANT: Shelton, David L.

; APPLICANT: Stewart, Timothy A.

; APPLICANT: Tumas, Daniel

; APPLICANT: Williams, P. Mickey

; APPLICANT: Wood, William I.

; TITLE OF INVENTION: Acids Encoding the Same

; FILE REFERENCE: P2630PIC18

; CURRENT APPLICATION NUMBER: US/09/978,681A

; CURRENT FILING DATE: 2002-03-19

; PRIOR APPLICATION NUMBER: 09/918585

; PRIOR FILING DATE: 2001-07-30

; PRIOR APPLICATION NUMBER: 60/062250

; PRIOR FILING DATE: 1997-10-17

; PRIOR APPLICATION NUMBER: 60/064249

; PRIOR FILING DATE: 1997-11-03

; PRIOR APPLICATION NUMBER: 60/065311

; PRIOR FILING DATE: 1997-11-13

; PRIOR APPLICATION NUMBER: 60/066364

; PRIOR FILING DATE: 1997-11-21

;; PRIOR APPLICATION NUMBER: 60/077450
;; PRIOR FILING DATE: 1998-03-10
;; PRIOR APPLICATION NUMBER: 60/077632
;; PRIOR FILING DATE: 1998-03-11
;; PRIOR APPLICATION NUMBER: 60/077641
;; PRIOR FILING DATE: 1998-03-11
;; PRIOR APPLICATION NUMBER: 60/077649
;; PRIOR FILING DATE: 1998-03-11
;; PRIOR APPLICATION NUMBER: 60/077791
;; PRIOR FILING DATE: 1998-03-12
;; PRIOR APPLICATION NUMBER: 60/078004
;; PRIOR FILING DATE: 1998-03-13
;; PRIOR APPLICATION NUMBER: 60/078886
;; PRIOR FILING DATE: 1998-03-20
;; PRIOR APPLICATION NUMBER: 60/078936
;; PRIOR FILING DATE: 1998-03-20
;; PRIOR APPLICATION NUMBER: 60/078910
;; PRIOR FILING DATE: 1998-03-20
;; PRIOR APPLICATION NUMBER: 60/078939
;; PRIOR FILING DATE: 1998-03-20
;; PRIOR APPLICATION NUMBER: 60/079294
;; PRIOR FILING DATE: 1998-03-25
;; PRIOR APPLICATION NUMBER: 60/079656
;; PRIOR FILING DATE: 1998-03-26
;; PRIOR APPLICATION NUMBER: 60/079664
;; PRIOR FILING DATE: 1998-03-27
;; PRIOR APPLICATION NUMBER: 60/079689
;; PRIOR FILING DATE: 1998-03-27
;; PRIOR APPLICATION NUMBER: 60/079663
;; PRIOR FILING DATE: 1998-03-27
;; PRIOR APPLICATION NUMBER: 60/079728
;; PRIOR FILING DATE: 1998-03-27
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;; PRIOR APPLICATION NUMBER: 60/079920
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;; PRIOR APPLICATION NUMBER: 60/080165
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;; PRIOR FILING DATE: 1998-04-01
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;; PRIOR APPLICATION NUMBER: 60/081203
;; PRIOR FILING DATE: 1998-04-09
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;; PRIOR FILING DATE: 1998-04-09
;; PRIOR APPLICATION NUMBER: 60/081955
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/081817
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/081819
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/081952

;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/081838
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/082568
;; PRIOR FILING DATE: 1998-04-21
;; PRIOR APPLICATION NUMBER: 60/082569
;; PRIOR FILING DATE: 1998-04-21
;; PRIOR APPLICATION NUMBER: 60/082704
;; PRIOR FILING DATE: 1998-04-22
;; PRIOR APPLICATION NUMBER: 60/082804
;; PRIOR FILING DATE: 1998-04-22
;; PRIOR APPLICATION NUMBER: 60/082700
;; PRIOR FILING DATE: 1998-04-22
;; PRIOR APPLICATION NUMBER: 60/082797
;; PRIOR FILING DATE: 1998-04-22
;; PRIOR APPLICATION NUMBER: 60/082796
;; PRIOR FILING DATE: 1998-04-23
;; PRIOR APPLICATION NUMBER: 60/083336
;; PRIOR FILING DATE: 1998-04-27
;; PRIOR APPLICATION NUMBER: 60/083322
;; PRIOR FILING DATE: 1998-04-28
;; PRIOR APPLICATION NUMBER: 60/083392
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083495
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083496
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083499
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083545
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083554
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083558
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083559
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083500
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083742
;; PRIOR FILING DATE: 1998-04-30
;; PRIOR APPLICATION NUMBER: 60/084366
;; PRIOR FILING DATE: 1998-05-05
;; PRIOR APPLICATION NUMBER: 60/084414
;; PRIOR FILING DATE: 1998-05-06
;; PRIOR APPLICATION NUMBER: 60/084441
;; PRIOR FILING DATE: 1998-05-06
;; PRIOR APPLICATION NUMBER: 60/084637
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084639
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084640
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084598
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084600
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084627
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084643
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/085339
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085338
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085323
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085582
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085700
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085689
;; PRIOR FILING DATE: 1998-05-15

;; PRIOR APPLICATION NUMBER: 60/085579
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085580
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085573
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085704
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085697
;; PRIOR FILING DATE: 1998-05-15
;
Query Match 100.0%; Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVRLYSCTPRNFSVSIREELKRTDTTFWPGCLLVKRCGGNCACCLHNCNECCQVPS 60
DB 240 LITEEVRLYSCTPRNFSVSIREELKRTDTTFWPGCLLVKRCGGNCACCLHNCNECCQVPS 299
QY 61 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 106
DB 300 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 345

RESULT 6
US-09-978-757A-488
; Sequence 488, Application US/09978757A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2630P1C26
; CURRENT APPLICATION NUMBER: US/09/978,757A
; CURRENT FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/077450
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: 60/077632

	PRIOR APPLICATION NUMBER:	60/082566
	PRIOR FILING DATE:	1998-04-21
	PRIOR APPLICATION NUMBER:	60/082569
	PRIOR FILING DATE:	1998-04-21
	PRIOR APPLICATION NUMBER:	60/082704
	PRIOR FILING DATE:	1998-04-22
	PRIOR APPLICATION NUMBER:	60/082804
	PRIOR FILING DATE:	1998-04-22
	PRIOR APPLICATION NUMBER:	60/082700
	PRIOR FILING DATE:	1998-04-22
	PRIOR APPLICATION NUMBER:	60/082797
	PRIOR FILING DATE:	1998-04-22
	PRIOR APPLICATION NUMBER:	60/082796
	PRIOR FILING DATE:	1998-04-23
	PRIOR APPLICATION NUMBER:	60/083336
	PRIOR FILING DATE:	1998-04-27
	PRIOR APPLICATION NUMBER:	60/083322
	PRIOR FILING DATE:	1998-04-28
	PRIOR APPLICATION NUMBER:	60/083392
	PRIOR FILING DATE:	1998-04-29
	PRIOR APPLICATION NUMBER:	60/083495
	PRIOR FILING DATE:	1998-04-29
	PRIOR APPLICATION NUMBER:	60/083496
	PRIOR FILING DATE:	1998-04-29
	PRIOR APPLICATION NUMBER:	60/083499
	PRIOR FILING DATE:	1998-04-29
	PRIOR APPLICATION NUMBER:	60/083545
	PRIOR FILING DATE:	1998-04-29
	PRIOR APPLICATION NUMBER:	60/083554
	PRIOR FILING DATE:	1998-04-29
	PRIOR APPLICATION NUMBER:	60/083558
	PRIOR FILING DATE:	1998-04-30
	PRIOR APPLICATION NUMBER:	60/084366
	PRIOR FILING DATE:	1998-05-05
	PRIOR APPLICATION NUMBER:	60/084414
	PRIOR FILING DATE:	1998-05-06
	PRIOR APPLICATION NUMBER:	60/084441
	PRIOR FILING DATE:	1998-05-06
	PRIOR APPLICATION NUMBER:	60/084637
	PRIOR FILING DATE:	1998-05-07
	PRIOR APPLICATION NUMBER:	60/084639
	PRIOR FILING DATE:	1998-05-07
	PRIOR APPLICATION NUMBER:	60/084640
	PRIOR FILING DATE:	1998-05-07
	PRIOR APPLICATION NUMBER:	60/084627
	PRIOR FILING DATE:	1998-05-07
	PRIOR APPLICATION NUMBER:	60/084598
	PRIOR FILING DATE:	1998-05-07
	PRIOR APPLICATION NUMBER:	60/084600
	PRIOR FILING DATE:	1998-05-07
	PRIOR APPLICATION NUMBER:	60/085338
	PRIOR FILING DATE:	1998-05-13
	PRIOR APPLICATION NUMBER:	60/085323
	PRIOR FILING DATE:	1998-05-13
	PRIOR APPLICATION NUMBER:	60/085582
	PRIOR FILING DATE:	1998-05-15
	PRIOR APPLICATION NUMBER:	60/085700
	PRIOR FILING DATE:	1998-05-15
	PRIOR APPLICATION NUMBER:	60/085689
	PRIOR FILING DATE:	1998-05-15
	PRIOR APPLICATION NUMBER:	60/085579
	PRIOR FILING DATE:	1998-05-15
	PRIOR APPLICATION NUMBER:	60/085580

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; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085573
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085704
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085697
; PRIOR FILING DATE: 1998-05-15

Query Match      100.0%; Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred No. 1,4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEVRLYSCTPRNFSVSIRELKRDTTFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
    |||||
Db 240 LITEVRLYSCTPRNFSVSIRELKRDTTFWPGCLLVKRCGNCACCLHNCNECQCVPS 299
    |||||

QY 61 KVTKKYHEVLQRPKTVGRGLHKLTDVALEHHEECDCVCRGSTGG 106
    |||||
Db 300 KVTKKYHEVLQRPKTVGRGLHKLTDVALEHHEECDCVCRGSTGG 345

RESULT 7
US-09-978-564A-488
Sequence 488, Application US/09978564A
GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630PIC25
; CURRENT APPLICATION NUMBER: US/09/978,564A
; CURRENT FILING DATE: 2001-10-16
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/077450
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: 60/077632
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077641
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077649
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077791
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/078004
; PRIOR FILING DATE: 1998-03-13
; PRIOR APPLICATION NUMBER: 60/078886
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078939
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/079294
; PRIOR FILING DATE: 1998-03-25
; PRIOR APPLICATION NUMBER: 60/079656
; PRIOR FILING DATE: 1998-03-26
; PRIOR APPLICATION NUMBER: 60/079664
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079663
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079728
; PRIOR FILING DATE: 1998-03-27
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; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079920
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; PRIOR FILING DATE: 1998-03-30
; PRIOR APPLICATION NUMBER: 60/080105
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/080107
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/080165
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/080194
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/080327
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; PRIOR APPLICATION NUMBER: 60/080328
; PRIOR FILING DATE: 1998-04-01
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; PRIOR FILING DATE: 1998-04-01
; PRIOR APPLICATION NUMBER: 60/080334
; PRIOR FILING DATE: 1998-04-01
; PRIOR APPLICATION NUMBER: 60/081070
; PRIOR FILING DATE: 1998-04-08
; PRIOR APPLICATION NUMBER: 60/081049
; PRIOR FILING DATE: 1998-04-08
; PRIOR APPLICATION NUMBER: 60/081071
; PRIOR FILING DATE: 1998-04-08
; PRIOR APPLICATION NUMBER: 60/081195
; PRIOR FILING DATE: 1998-04-08
; PRIOR APPLICATION NUMBER: 60/081203
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081229
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081955
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081817
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081819
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081952
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081838
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/082568
; PRIOR FILING DATE: 1998-04-21
; PRIOR APPLICATION NUMBER: 60/082569
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XXXXXXXXXXXXXXXXXXXX

[illegible]

Db 300 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCDVCRGSTGG 345

RESULT 9

US-09-564-595D-33
; Sequence 33, Application US/09564595D
; GENERAL INFORMATION:
; APPLICANT: Gilbert, Teresa
; APPLICANT: Hart, Charles E.
; APPLICANT: Sheppard, Paul O.
; TITLE OF INVENTION: GROWTH FACTOR HOMOLOG ZVEGF4
; FILE REFERENCE: 99-19
; CURRENT APPLICATION NUMBER: US/09/564,595D
; CURRENT FILING DATE: 2000-05-03
; PRIOR APPLICATION NUMBER: US 09/304,216
; PRIOR FILING DATE: 1999-05-03
; PRIOR APPLICATION NUMBER: US 60/164,463
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: US 60/180,169
; PRIOR FILING DATE: 2000-02-04
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-564-595D-33

Query Match 100.0%; Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LTTEEVRLYSCPTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
|||||
Db 240 LTTEEVRLYSCPTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 299
|||||
QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCDVCRGSTGG 106
|||||
Db 300 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCDVCRGSTGG 345

RESULT 10

US-09-999-829A-488
; Sequence 488, Application US/09999829A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.

; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2630PIC61
; CURRENT APPLICATION NUMBER: US/09/999,829A
; CURRENT FILING DATE: 2002-03-19
; NUMBER OF SEQ ID NOS: 624
; SEQ ID NO 488
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-999-829A-488

Query Match 100.0%; Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LTTEEVRLYSCPTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
|||||
Db 240 LTTEEVRLYSCPTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 299
|||||
QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCDVCRGSTGG 106
|||||
Db 300 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCDVCRGSTGG 345

RESULT 11

US-09-978-375A-488
; Sequence 488, Application US/09978375A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2630PIC24
; CURRENT APPLICATION NUMBER: US/09/978,375A
; CURRENT FILING DATE: 2002-04-19
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 624
; SEQ ID NO 488
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-978-375A-488

Query Match 100.0%; Score 597; DB 5; Length 345;

Best Local Similarity 100.08; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVRLSCTPRNFSVSIREELKRTDIFWPGCLLVKRCGNCACCLHNCNEQCQVPS 60
|||||
Db 240 LITEEVRLSCTPRNFSVSIREELKRTDIFWPGCLLVKRCGNCACCLHNCNEQCQVPS 299
|||||

QY 61 KVTYKHYEVLQRPKTGVRLGHLKSLTDVALEHHECDVCVRGSGTG 106
|||||
Db 300 KVTYKHYEVLQRPKTGVRLGHLKSLTDVALEHHECDVCVRGSGTG 345
|||||

RESULT 12
US-10-013-921A-488
; Sequence 488, Application US/10013921A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630PIC84
; CURRENT APPLICATION NUMBER: US/10/013,921A
; PRIOR FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/077450
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: 60/077632
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077641
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077649
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077791
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/078004
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; PRIOR APPLICATION NUMBER: 60/078936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078939
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/079294
; PRIOR FILING DATE: 1998-03-25
; PRIOR APPLICATION NUMBER: 60/079656
; PRIOR FILING DATE: 1998-03-26
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 PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 6; Length 345;
 Best Local Similarity 100.0%; Pred. No. 1.4e-53;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LTTEEVRVLSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQVPS 60
 Db 240 LTTEEVRVLSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQVPS 299
 QY 61 KVTKKYHEVLQURPKTGVRLGHLKSLDVALEHHEEDCDVCRGSTGG 106
 Db 300 KVTKKYHEVLQURPKTGVRLGHLKSLDVALEHHEEDCDVCRGSTGG 345
 RESULT 13
 US-10-013-929A-488
 ; Sequence 488, Application US/10013929A
 ; GENERAL INFORMATION:
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Baker Kevin P.
 ; APPLICANT: Botstein, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan
 ; APPLICANT: Ferrara, Napoleon
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, Audrey
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, J. Christopher
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillan, Kenneth J.
 ; APPLICANT: Kijavin, Ivar J.
 ; APPLICANT: Kuo, Sophia S.
 ; APPLICANT: Napier, Mary A.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Shelton, David L.
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William I.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; FILE REFERENCE: P2630PIC89
 ; CURRENT APPLICATION NUMBER: US/10/013,929A
 ; CURRENT FILING DATE: 2002-03-19
 ; PRIOR APPLICATION NUMBER: 09/918585
 ; PRIOR FILING DATE: 2001-07-30
 ; PRIOR APPLICATION NUMBER: 60/062250
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 ; PRIOR FILING DATE: 1998-05-15
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 ; PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 6; Length 345;

Best Local Similarity 100.0%; Pred. No. 1.4e-53;

Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEVRLYSCTPRNFSVSIRELKRDTTFWPGCLLVKRCGGNCACCLHNCNECCVPS 60

DB 240 LITEVRLYSCTPRNFSVSIRELKRDTTFWPGCLLVKRCGGNCACCLHNCNECCVPS 299

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59 PRIOR APPLICATION NUMBER: 60/085704
60 PRIOR FILING DATE: 1998-05-15
61 PRIOR APPLICATION NUMBER: 60/085697
62 PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 6; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LITEEVRVLSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECCQVPS 60
DB 240 LITEEVRVLSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECCQVPS 299
QY 61 KVTKKYHEVLQRPKTYGVRGLHLSLTDVALEHHEECDCVCRGSTGG 106

Db 300 KVTKKYHEVLQRPKTYGVRGLHLSLTDVALEHHEECDCVCRGSTGG 345
RESULT 15
US-10-017-082A-488
Sequence 488, Application US/10017082A
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan
APPLICANT: Ferrara, Napoleon
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, J. Christopher
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APPLICANT: Hillan, Kenneth J.
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APPLICANT: Kuo, Sophia S.
APPLICANT: Napier, Mary A.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Shelton, David L.
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P2630P1C71
CURRENT APPLICATION NUMBER: US/10/017.082A
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
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;; PRIOR APPLICATION NUMBER: 60/083558
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083559
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083500
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083742
;; PRIOR FILING DATE: 1998-04-30
;; PRIOR APPLICATION NUMBER: 60/084366
;; PRIOR FILING DATE: 1998-05-05
;; PRIOR APPLICATION NUMBER: 60/084414
;; PRIOR FILING DATE: 1998-05-06
;; PRIOR APPLICATION NUMBER: 60/084441
;; PRIOR FILING DATE: 1998-05-06
;; PRIOR APPLICATION NUMBER: 60/084637
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084639
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084640
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084598
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084600
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084627
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084643
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/085339
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085338
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085323
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085582
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085700
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085689
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085579
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085580
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085573
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085704
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085697
;; PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 6; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LTTEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLYKRCGNCACCLHNCNECQCVPVS 60
DB 240 LTTEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLYKRCGNCACCLHNCNECQCVPVS 299
QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRCSTGG 106
DB 300 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRCSTGG 345

Search completed: May 24, 2002, 10:01:13
Job time: 207 sec

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:52:46 ; Search time 31.01 Seconds
(without alignments)
379.678 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345

Perfect score: 597

Sequence: 1 LITEVRLVSLTPRNFVSII.....DVALEHHECDVCVCGSTGG 106

Scoring table:

BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 747574 seqs, 111073796 residues

Total number of hits satisfying chosen parameters: 747574

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

A_Geneseq_032802.*
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2: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1981.DAT.*
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21: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA2000.DAT.*
22: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA2001.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	597	100.0	113	21	Human VEGF-X prote
2	597	100.0	113	21	Human VEGF-X prote
3	597	100.0	121	22	Synthetic protein
4	597	100.0	123	22	Synthetic protein
5	597	100.0	149	21	Human VEGF-X PDGF
6	597	100.0	318	21	A fragment of plat
7	597	100.0	339	21	Lung cancer associ
8	597	100.0	345	20	Human VEGF-E prote
9	597	100.0	345	20	Human PRO200 prote
10	597	100.0	345	20	Human vascular end
11	597	100.0	345	21	Human zvegf3, SEQ

12	597	100.0	345	21	Human platelet-der
13	597	100.0	345	21	Human PRO200 (UNQ1
14	597	100.0	345	21	Human RACE generat
15	597	100.0	345	21	Human VEGF-X homol
16	597	100.0	345	21	Human VEGF-X prote
17	597	100.0	345	21	Human VEGF-X prote
18	597	100.0	345	21	Human VEGF-X prote
19	597	100.0	345	21	Human 990126veg p
20	597	100.0	345	21	Human VEGF-X prote
21	597	100.0	345	21	Human PRO200 (vasc
22	597	100.0	345	21	Human PRO200 prote
23	597	100.0	345	21	Human PRO713 prote
24	597	100.0	345	21	Human TANGO 128.
25	597	100.0	345	21	Human growth facto
26	597	100.0	345	21	Human growth facto
27	597	100.0	345	21	Amino acid sequenc
28	597	100.0	345	21	Bone morphogenic p
29	597	100.0	345	22	Human zvegf3 poly p
30	597	100.0	345	22	Polypeptide for hu
31	597	100.0	345	22	Human PRO200 poly p
32	597	100.0	345	22	Human VEGF/PDGF-11
33	597	100.0	345	22	Human LP8, a PDGF-
34	597	100.0	345	22	Human zvegf3 prote
35	597	100.0	345	22	Human PRO200 prote
36	597	100.0	345	22	Human PRO200 prote
37	597	100.0	345	22	Human angiogenesis
38	597	100.0	374	21	Human VEGF-X prote
39	587	98.3	354	21	Human VEGF-X prote
40	587	98.3	354	21	Human VEGF-X prote
41	580.5	97.2	227	21	Human VEGF-X prote
42	580.5	97.2	227	21	Human VEGF-X prote
43	572	95.8	345	21	Mouse zvegf3, SEQ
44	572	95.8	345	21	Murine vascular en
45	572	95.8	345	21	A murine platelet-

ALIGNMENTS

RESULT 1

AA10631

ID AAB10631 standard; Protein; 113 AA.

XX AC AAB10631;

XX DT 19-JAN-2001 (first entry)

XX DE Human VEGF-X protein fragment #1.

XX KW VEGF-X; vascular endothelial growth factor; human; vulnery; cytostatic;
XX KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
XX KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
XX KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
XX KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
XX KW venous sore; diabetic ulcer; burns; skin graft growth.

XX OS Homo sapiens.

XX PN WO200037641-A2.

XX PD 29-JUN-2000.

XX PF 21-DEC-1999; 99WO-US30503.

XX PR 22-DEC-1998; 98GB-0028377.

XX PR 18-MAR-1999; 99US-0124967.

XX PR 08-NOV-1999; 99US-0164131.

XX (JANC) JANSSEN PHARM NV.

XX PI Gordon RD, Sprengel JJ, Yon JR, Dijkmans JTH, Gosiewska A;

XX PI Dhanaraj SN, Xu J;

DR WPI: 2000-442669/38.
 XX N-PSDB; AAA71936.
 PT New vascular endothelial growth factor protein, useful for treating or
 PT preventing diseases associated with inappropriate angiogenesis activity
 PT such as cancer, rheumatoid arthritis, psoriasis and wounds -
 XX
 PS Disclosure: Fig 1; 127pp; English.
 XX
 CC This invention describes a novel vascular endothelial growth factor-X
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
 CC vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
 CC antidiabetic activity and acts as an angiogenesis and vascularization
 CC regulator. An antisense molecule of the invention is useful for treating
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
 CC retinopathy by inhibiting angiogenic activity or inappropriate
 CC vascularization including formation and proliferation of new blood
 CC vessels, growth and development of tissues, tissue regeneration and organ
 CC and tissue repair in a subject. The products of the invention are useful
 CC for preparing medicaments for treating wounds such as dermal ulcers,
 CC pressure sores, venous sores, diabetic ulcers and burns and to promote
 CC skin graft growth, tissue repair, proliferation of new blood vessels,
 CC tissue regeneration and organ repair by promoting angiogenic activity or
 CC vascularization. This sequence represents the human VEGF-X protein
 CC described in the method of the invention.
 XX
 SQ Sequence 113 AA;

Query Match 100.0%; Score 597; DB 21; Length 113;
 Best Local Similarity 100.0%; Pred. No. 9.6e-55;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LLTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNACCLHNCNECQCVPS 60
 Db 8 llteevrlyscptprnfsvsireelkrttdtlfwpgcllvkrcgncacclhncnecqcvps 67
 QY 61 KVTYKHYEVLQRLPKTGVRGLHSLTDVALEHHEECDCVCRGSGTG 106
 Db 68 kvtkkhyevlqlrpkgtgvrghlsldvalehheecdcvcrsgtg 113

RESULT 2
 AAB10632
 ID AAB10632 standard; Protein; 113 AA.

XX AC AAB10632;

XX DT 19-JAN-2001 (first entry)

XX DE Human VEGF-X protein fragment #2.

XX VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic;
 KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
 KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
 KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
 KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
 KW venous sore; diabetic ulcer; burns; skin graft growth.

XX OS Homo sapiens.

XX PN WO200037641-A2.

XX PD 29-JUN-2000.

XX PF 21-DEC-1999; 99WO-US30503.

XX PR 22-DEC-1998; 98GB-0028377.

XX PR 18-MAR-1999; 99US-0124967.

XX PR 08-NOV-1999; 99US-0164131.

XX PA (JANC) JANSSEN PHARM NV.

PI Gordon RD, Sprengel JJ, Yon JR, Dijkmans JH, Gosiewska A;
 PI Dhanaraj SN, Xu J;
 XX
 DR WPI: 2000-442669/38.
 XX
 PT New vascular endothelial growth factor protein, useful for treating or
 PT preventing diseases associated with inappropriate angiogenesis activity
 PT such as cancer, rheumatoid arthritis, psoriasis and wounds -
 XX
 PS Disclosure: Fig 2; 127pp; English.
 XX
 CC This invention describes a novel vascular endothelial growth factor-X
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
 CC vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
 CC antidiabetic activity and acts as an angiogenesis and vascularization
 CC regulator. An antisense molecule of the invention is useful for treating
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
 CC retinopathy by inhibiting angiogenic activity or inappropriate
 CC vascularization including formation and proliferation of new blood
 CC vessels, growth and development of tissues, tissue regeneration and organ
 CC and tissue repair in a subject. The products of the invention are useful
 CC for preparing medicaments for treating wounds such as dermal ulcers,
 CC pressure sores, venous sores, diabetic ulcers and burns and to promote
 CC skin graft growth, tissue repair, proliferation of new blood vessels,
 CC tissue regeneration and organ repair by promoting angiogenic activity or
 CC vascularization. This sequence represents the human VEGF-X protein
 CC described in the method of the invention.
 XX
 SQ Sequence 113 AA;

Query Match 100.0%; Score 597; DB 21; Length 113;
 Best Local Similarity 100.0%; Pred. No. 9.6e-55;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LLTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNACCLHNCNECQCVPS 60
 Db 8 llteevrlyscptprnfsvsireelkrttdtlfwpgcllvkrcgncacclhncnecqcvps 67
 QY 61 KVTYKHYEVLQRLPKTGVRGLHSLTDVALEHHEECDCVCRGSGTG 106
 Db 68 kvtkkhyevlqlrpkgtgvrghlsldvalehheecdcvcrsgtg 113

RESULT 3

AAB74034

ID AAB74034 standard; Protein; 121 AA.

XX AC AAB74034;

XX DT 09-AUG-2001 (first entry)

XX DE Synthetic protein #2.

XX VEGF/PDGF-like factor; vascular endothelial growth factor; VEGF;
 KW platelet derived growth factor; PDGF; neovascularisation; disease.

XX OS Synthetic.

XX PN JP2001017188-A.

XX PD 23-JAN-2001.

XX PF 24-APR-2000; 2000JP-0122994.

XX PR 22-APR-1999; 99JP-0115516.

XX (KYOW) KYOWA HAKKO KOGYO KK.

XX (HERI-) HERIKKUSU KENKYUSHO KK.

XX WPI: 2001-285410/30.

PT New VEGF/PDGF-like factor useful for the development of treating agents

PT for diseases accompanied by accentuation of abnormal neovascularization

XX
PS
XX
CC Claim 8; Page 45; 52pp; Japanese.
CC The present sequence is provided in a specification relating to a novel vascular endothelial growth factor (VEGF)/platelet derived growth factor (PDGF)-like factor of 345 amino acids, or to a sequence in which at least one amino acid is deleted, replaced or added compared to the native sequence. The nucleotide sequence encoding the VEGF/PDGF-like factor may be integrated into a vector and used to transform a host cell. The VEGF/PDGF-like factor may be used in the development of agents for treating diseases associated with abnormal neovascularization.
XX
SQ Sequence 121 AA;

Query Match 100.0%; Score 597; DB 22; Length 121;
Best Local Similarity 100.0%; Pred. No. 1e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LITEEVLRYSCPTPRNFSVSIRESLKRDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
DB 16 llteevrlyscptprnfsvsireelkrtidfwpqcllvkrsgncacclhncncqcvps 75
QY 61 KVTKKYHEVLQRLPKGTGVRGLHKLSTDLVALEHHEEDCVCRGSGTG 106
DB 76 kvtkkyhevlqlrpkgtgvrghlsldvalehheecdvcrgstgg 121

RESULT 4
AAB74033
ID AAB74033 standard; Protein; 123 AA.
XX
AC AAB74033;
XX
DT 09-AUG-2001 (first entry)
XX
DE Synthetic protein #1.
XX
DE VEGF/PDGF-like factor; vascular endothelial growth factor; VEGF;
KW platelet derived growth factor; PDGF; neovascularization; disease.
XX
OS Synthetic.
XX
PN JP2001017188-A.
XX
PD 23-JAN-2001.
XX
PF 24-APR-2000; 2000JP-0122994.
XX
XX 22-APR-1999; 99JP-0115516.
XX
XX (KYOWA) KYOWA HAKKO KOGYO KK.
PA (HERI-) HERIKKUSU KENKYUSHO KK.
XX
XX WPI; 2001-285410/30.
XX

XX New VEGF/PDGF-like factor useful for the development of treating agents for diseases accompanied by accentuation of abnormal neovascularization
PT
PT
PT
PS Claim 7; Page 45; 52pp; Japanese.
XX

XX The present sequence is provided in a specification relating to a novel vascular endothelial growth factor (VEGF)/platelet derived growth factor (PDGF)-like factor of 345 amino acids, or to a sequence in which at least one amino acid is deleted, replaced or added compared to the native sequence. The nucleotide sequence encoding the VEGF/PDGF-like factor may be integrated into a vector and used to transform a host cell. The VEGF/PDGF-like factor may be used in the development of agents for treating diseases associated with

CC abnormal neovascularisation.
XX
SQ Sequence 123 AA;

Query Match 100.0%; Score 597; DB 22; Length 123;
Best Local Similarity 100.0%; Pred. No. 1.1e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LITEEVLRYSCPTPRNFSVSIRESLKRDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
DB 18 llteevrlyscptprnfsvsireelkrtidfwpqcllvkrsgncacclhncncqcvps 77
QY 61 KVTKKYHEVLQRLPKGTGVRGLHKLSTDLVALEHHEEDCVCRGSGTG 106
DB 78 kvtkkyhevlqlrpkgtgvrghlsldvalehheecdvcrgstgg 123

RESULT 5
AAB10642
ID AAB10642 standard; Protein; 149 AA.
XX
AC AAB10642;
XX
DT 19-JAN-2001 (first entry)
XX
DE Human VEGF-X PDGF-like domain protein.
XX
KW VEGF-X; vascular endothelial growth factor; human; vulnery; cytostatic;
KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
KW venous sore; diabetic ulcer; burns; skin graft growth.
XX
OS Homo sapiens.
XX
PN WO200037641-A2.
XX
PD 29-JUN-2000.
XX
PF 21-DEC-1999; 99WO-US30503.
XX
PR 22-DEC-1998; 98GB-0028377.
PR 18-MAR-1999; 99US-0124967.
PR 08-NOV-1999; 99US-0164131.
XX
PA (JANC) JANSSEN PHARM NV.
XX
XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;
PI Dhanraj SN, Xu J;
XX
XX WPI; 2000-442669/38.
DR N-PSDB; AAA71986.
XX
XX New vascular endothelial growth factor protein, useful for treating or preventing diseases associated with inappropriate angiogenesis activity such as cancer, rheumatoid arthritis, psoriasis and wounds -
PT
PT
XX
PS Disclosure; Fig 24; 127pp; English.
XX

XX This invention describes a novel vascular endothelial growth factor-X (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has vulnery, cytostatic, antirheumatic, antiarthritic, antipsoriatic and antidiabetic activity and acts as an angiogenesis and vascularization regulator. An antisense molecule of the invention is useful for treating or preventing cancer, rheumatoid arthritis, psoriasis and diabetic retinopathy by inhibiting angiogenic activity or inappropriate vascularization including formation and proliferation of new blood vessels, growth and development of tissues, tissue regeneration and organ and tissue repair in a subject. The products of the invention are useful for preparing medicaments for treating wounds such as dermal ulcers, pressure sores, venous sores, diabetic ulcers and burns and to promote

CC skin graft growth, tissue repair, proliferation of new blood vessels,
 CC tissue regeneration and organ repair by promoting angiogenic activity or
 CC vascularization. This sequence represents a human VEGF-X protein
 CC PDGF-like domain which can be expressed in E. coli systems and which is
 CC described in the method of the invention.
 XX
 SQ Sequence 149 AA;

Query Match 100.0%; Score 597; DB 21; Length 149;
 Best Local Similarity 100.0%; Pred. No. 1.3e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LLTEVRLYSCPTNFSVSIREELKRTDTIFWPGCLLVKRCGGNACCLHNCNECQCVPS 60
 |||||
 Db 44 llteevrlyscptnfsvsireelkrtdtifwpgcllvkrcggncacclhncnecqcvps 103
 |||||
 QY 61 KVTKKYHEVLQRLPKTGVRGLHKSITDVALEHHEECDCVCRGSTGG 106
 |||||
 Db 104 kvtkkyhevlqlrpkgtgvrghlksitdvalehheecdvcvrgstgg 149

RESULT 6
 AAY84558
 ID AAY84558 standard; Protein; 318 AA.
 XX
 AC AAY84558;
 XX
 DT 25-JUL-2000 (first entry)
 XX
 DE A fragment of platelet-derived growth factor C (PDGF-C).
 XX
 KW Platelet-derived growth factor C; PDGF-C; cell proliferation;
 KW growth factor; heparin; connective tissue; wound healing; VEGF-F;
 KW fibroblast mitogenesis; PDGF alpha receptor activation; tumour growth;
 KW choriocarcinoma; Wilms tumour; megakaryoblastic leukaemia;
 KW lung carcinoma; erythroleukemia; tissue remodelling.
 XX
 OS Homo sapiens.
 XX

Key Location/Qualifiers
 FH Misc-difference 287
 FT /note= "encoded by AAS"
 XX
 PN WO200018212-A2.
 XX
 PD 06-APR-2000.
 XX
 PP 30-SEP-1999; 99WO-0522668.
 XX
 PR 30-SEP-1998; 98US-0102461.
 PR 12-NOV-1998; 98US-0108109.
 PR 03-DEC-1998; 98US-0110749.
 PR 18-DEC-1998; 98US-0113002.
 PR 21-MAY-1999; 99US-0135426.
 PR 15-JUL-1999; 99US-0144022.
 XX
 PA (LUDW-) LUDWIG INST CANCER RES.
 PA (UYHE-) UNIV HELSINKI LICENSING LTD.
 XX
 PI Eriksson U, Aase K, Lee X, Ponten A, Uutela M, Alitalo K;
 PI Oestman A, Heldin C, Betsholz C;
 XX
 XX WPI; 2000-292954/25.
 DR N-PSDB; AAA12524.
 XX
 XX Novel DNA encoding PDGF-C useful to stimulate or enhance proliferation,
 PT differentiation, growth and motility of cells expressing the PDGF-C
 PT receptor
 XX
 XX Disclosure; Fig 4; 135pp; English.
 PS
 XX The present sequence represents a human platelet-derived growth factor C
 CC

CC (PDGF-C) (formally designated VEGF-F) fragment. PDGF-C polypeptides have
 CC the ability to stimulate and enhance proliferation or differentiation,
 CC and/or growth or motility of cells expressing a PDGF-C receptor.
 CC PDGF-C polypeptides can be used in pharmaceuticals for promoting cell
 CC proliferation, preferably in combination with one other growth factor
 CC and heparin. Pharmaceuticals comprising PDGF-C polypeptides can also
 CC be used for stimulating connective tissue or wound healing. The
 CC PDGF-C polypeptide can be enzymatically processed to generate the active
 CC truncated form of PDGF-C and used to regulate the receptor-binding
 CC specificity of PDGF-C. PDGF-C can also be used to promote fibroblast
 CC mitogenesis in a mammal and to induce PDGF alpha receptor activation.
 CC PDGF-C antagonists can be used to inhibit tumour growth of a tumour
 CC expressing PDGF-C in a mammal. Specific types of human tumours, e.g.
 CC choriocarcinoma, Wilms tumour, megakaryoblastic leukaemia, lung carcinoma
 CC and erythroleukemia, can be identified by testing for expression of
 CC PDGF-C. PDGF-C antagonists can also be used to inhibit tissue
 CC remodelling during invasion of tumour cells into a normal population of
 CC cells. Antagonists can also be used to treat fibrotic conditions,
 CC especially found in the lung, kidney or liver.
 XX
 SQ Sequence 318 AA;

Query Match 100.0%; Score 597; DB 21; Length 318;
 Best Local Similarity 100.0%; Pred. No. 2.9e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLTEVRLYSCPTNFSVSIREELKRTDTIFWPGCLLVKRCGGNACCLHNCNECQCVPS 60
 |||||
 Db 213 llteevrlyscptnfsvsireelkrtdtifwpgcllvkrcggncacclhncnecqcvps 272
 |||||
 QY 61 KVTKKYHEVLQRLPKTGVRGLHKSITDVALEHHEECDCVCRGSTGG 106
 |||||
 Db 273 kvtkkyhevlqlrpkgtgvrghlksitdvalehheecdvcvrgstgg 318

RESULT 7
 AAB58438
 ID AAB58438 standard; Protein; 339 AA.
 XX
 AC AAB58438;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Lung cancer associated polypeptide sequence SEQ ID 776.
 XX
 KW Human; lung cancer associated protein; neuroprotective; cytostatic;
 KW cardioactive; immunomodulatory; muscular active; vulnerary;
 KW gastrointestinal; nephrotropic; antineoplastic; gynecological;
 KW antibacterial; diagnosis; neural disorder; immune disorder; reproductive;
 KW proliferative disorder; wound healing; infectious disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200055180-A2.
 XX
 PD 21-SEP-2000.
 XX
 PF 08-MAR-2000; 2000WO-US05918.
 XX
 PR 12-MAR-1999; 99US-0124270.
 XX
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA (ROSE/) ROSEN C A.
 XX
 XX Ruben SM;
 PI
 XX WPI; 2000-587514/55.
 DR N-PSDB; AAF18314.
 XX
 XX Lung cancer associated gene sequences, referred to as lung cancer
 PT antigens, useful for treatment, prevention, and diagnosis of disorders
 PT such as lung cancer -

Claim 11: Page 1305-1306; 1425pp; English.

Polynucleotide sequences AAF17982 - AAF18424 encode human lung cancer associated proteins represented in AAB58106 - AAB58548. Lung cancer associated proteins and polynucleotide sequences, their agonists, and antagonists may have neuroprotective; cytostatic; cardioactive; immunomodulatory; muscular active general; vulnerable; gastrointestinal general; nephrotropic; anti-infective; gynecological; or antibacterial activity. The invention also includes antibodies specific for the protein or polynucleotide sequences. The lung cancer associated polynucleotide sequences may be used for detection of lung cancer, chromosome identification, as chromosome markers, and for numerous other diagnostic or research purposes. The proteins may be used to treat disorders such as neural, immune, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular, renal, and proliferative disorders. The proteins may also be used in the treatment of wounds and infectious diseases. Polynucleotide sequences AAF18425 - AAF18433 and peptide AAB58549 are used in the course of the invention for the identification and characterisation of the polynucleotide and protein sequences.

Sequence 339 AA;

Query Match 100.0%; Score 597; DB 21; Length 339;
Best Local Similarity 100.0%; Pred. No. 3.1e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVPLYSCTPRNFVSYSIREELKRTDTIFWPGCLLVKRCGGNCACLLHNCNCQCVP 60
Db 234 l l t e e v l y s c t p r n f v s y s i r e e l k r t d t i f w p g c l l v k r c g g n c a c l l h n c n c q c v p s 293
QY 61 KVTKKYHEVLQRPKTVGRGLHKS LTDVALEHHHECCDCVCRGSGG 106
Db 294 k v t k k y h e v l q r p k t v g r g l h k s l t d v a l e h h e e c d c v r g s t g g 339

RESULT 8
ID AAY33679
AA AAY33679 standard; Protein; 345 AA.
AC AAY33679;
XX
XX 11-JAN-2000 (first entry)
XX Human VEGF-E protein.
XX
XX VEGF-E; human; vascular endothelial cell growth factor; wound repair;
XX treatment; cardiovascular disorder; endothelial disorder; therapy;
XX tissue generation; regeneration; cardiac hypertrophy; cancer; detection;
XX angiogenic disorder; age-related macular degeneration; vascular disease;
XX neovascularization; tumor; gene mapping.
XX
OS Homo sapiens.
XX
XX WO9947677-A2.
XX
XX 23-SEP-1999.
XX
XX 10-MAR-1999; 99WO-US05190.
XX
XX 17-MAR-1998; 98US-0040220.
XX
XX 02-NOV-1998; 98US-0184216.
XX
XX (GETH) GENENTECH INC.
XX
XX Ferrara N, Kuo SS;
XX
XX WPI; 1999-580306/49.
XX
XX N-PSDB; AAZ23691.
XX
XX New growth factor polypeptide useful for treating cardiovascular or

PR 11-MAR-1998; 98US-0077649.
PR 12-MAR-1998; 98US-0077791.
PR 13-MAR-1998; 98US-0078004.
PR 17-MAR-1998; 98US-0040220.
PR 20-MAR-1998; 98US-0078886.
PR 20-MAR-1998; 98US-0078910.
PR 20-MAR-1998; 98US-0078936.
PR 20-MAR-1998; 98US-0078939.
PR 25-MAR-1998; 98US-0079294.
PR 26-MAR-1998; 98US-0079656.
PR 27-MAR-1998; 98US-0079663.
PR 27-MAR-1998; 98US-0079664.
PR 27-MAR-1998; 98US-0079669.
PR 27-MAR-1998; 98US-0079728.
PR 27-MAR-1998; 98US-0079786.
PR 30-MAR-1998; 98US-0079920.
PR 30-MAR-1998; 98US-0079923.
PR 31-MAR-1998; 98US-0080105.
PR 31-MAR-1998; 98US-0080107.
PR 31-MAR-1998; 98US-0080165.
PR 31-MAR-1998; 98US-0080194.
PR 01-APR-1998; 98US-0080327.
PR 01-APR-1998; 98US-0080328.
PR 01-APR-1998; 98US-0080333.
PR 01-APR-1998; 98US-0080334.
PR 08-APR-1998; 98US-0081049.
PR 08-APR-1998; 98US-0081070.
PR 08-APR-1998; 98US-0081071.
PR 09-APR-1998; 98US-0081195.
PR 09-APR-1998; 98US-0081203.
PR 09-APR-1998; 98US-0081229.
PR 15-APR-1998; 98US-0081817.
PR 15-APR-1998; 98US-0081838.
PR 15-APR-1998; 98US-0081952.
PR 15-APR-1998; 98US-0081955.
PR 21-APR-1998; 98US-0082568.
PR 21-APR-1998; 98US-0082569.
PR 22-APR-1998; 98US-0082700.
PR 22-APR-1998; 98US-0082704.
PR 22-APR-1998; 98US-0082804.
PR 23-APR-1998; 98US-0082767.
PR 23-APR-1998; 98US-0082796.
PR 27-APR-1998; 98US-0083336.
PR 28-APR-1998; 98US-0083322.
PR 29-APR-1998; 98US-0083392.
PR 29-APR-1998; 98US-0083495.
PR 29-APR-1998; 98US-0083496.
PR 29-APR-1998; 98US-0083499.
PR 29-APR-1998; 98US-0083500.
PR 29-APR-1998; 98US-0083545.
PR 29-APR-1998; 98US-0083554.
PR 29-APR-1998; 98US-0083558.
PR 29-APR-1998; 98US-0083559.
PR 30-APR-1998; 98US-0083742.
PR 05-MAY-1998; 98US-0084366.
PR 06-MAY-1998; 98US-0084414.
PR 06-MAY-1998; 98US-0084441.
PR 07-MAY-1998; 98US-0084598.
PR 07-MAY-1998; 98US-0084600.
PR 07-MAY-1998; 98US-0084627.
PR 07-MAY-1998; 98US-0084637.
PR 07-MAY-1998; 98US-0084639.
PR 07-MAY-1998; 98US-0084640.
PR 07-MAY-1998; 98US-0084643.
PR 13-MAY-1998; 98US-0085323.
PR 13-MAY-1998; 98US-0085338.
PR 13-MAY-1998; 98US-0085339.
PR 15-MAY-1998; 98US-0085573.
PR 15-MAY-1998; 98US-0085579.
PR 15-MAY-1998; 98US-0085580.
PR 15-MAY-1998; 98US-0085582.
PR 15-MAY-1998; 98US-0085689.
PR 15-MAY-1998; 98US-0085697.

PR 15-MAY-1998; 98US-0085700.
PR 15-MAY-1998; 98US-0085704.
PR 18-MAY-1998; 98US-0086023.
PR 22-MAY-1998; 98US-0086392.
PR 22-MAY-1998; 98US-0086414.
PR 22-MAY-1998; 98US-0086430.
PR 22-MAY-1998; 98US-0086486.
PR 28-MAY-1998; 98US-0087098.
PR 28-MAY-1998; 98US-0087106.
PR 28-MAY-1998; 98US-0087208.
PR 30-JUL-1998; 98US-0094651.
PR 11-SEP-1998; 98US-0100038.
XX
XX (GETH) GENENTECH INC.

XX Wood WI, Goddard A, Gurney A, Yuan J, Baker KP, Chen J;

XX WPI; 1999-551358/46.
XX N-PSDB; AA234296.

XX New secreted and transmembrane polypeptides and their polynucleotides,
PT useful for treating blood coagulation disorders, cancers and cellular
PT adhesion disorders -

XX Claim 12; Fig 207; 530pp; English.

XX The present invention describes secreted and transmembrane polypeptides
CC and their polynucleotides. The nucleotide sequences are useful as
CC sources of probes, primers, for chromosome mapping, and for generation
CC of antisense sequences. They can also be used to create transgenic
CC animals. The proteins can be used to treat a variety of diseases and
CC disorders, depending on their function. Diseases that may be treated
CC include blood coagulation disorders, cancers and cellular adhesion
CC disorders. They may also be used to raise antibodies. AA233891 to
CC AA234338, and AA41685 to AA41774 represent polynucleotide and
CC polypeptide sequence given in the exemplification of the present
CC invention.

XX Sequence 345 AA;

Query Match 100.0%; Score 597; DB 20; Length 345;
Best Local Similarity 100.0%; Pred. No. 3.2e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNACCLHNCNCCVPS 60
|||||

Db 240 llteevrlyscprnfsvsireelkrttdtlfwpgcllvkrcgncacclhncnccvps 299
|||||

QY 61 KVTKKYHEVLQLRPKTGVRGLHKSLTDVALEHHECDVCVCGSTGG 106
|||||

Db 300 kvtkkyhevlqlrpkgtvrglhksltdvalehhecdvcvrgstgg 345
|||||

RESULT 10

AA30023

ID AAY30023 standard; Protein; 345 AA.

XX AC AAY30023;

XX DT 11-OCT-1999 (first entry)

XX Human vascular endothelial growth factor related protein.

XX Vascular endothelial growth factor related protein; VEGF-R protein;
XX tissue growth inhibition; tumour growth; cancer; tissue growth;
XX angiogenesis; coronary artery blockage.

XX Homo sapiens.

XX WO9937671-A1.

XX 29-JUL-1999.

XX 26-JAN-1999; 99WO-US01574.
 XX 31-AUG-1998; 98US-0098548.
 PR 27-JAN-1998; 98US-0072635.
 PR 05-JUN-1998; 98US-0088089.
 PR 24-JUN-1998; 98US-0090544.
 XX (BLIL) LILLY & CO ELI.
 XX Dou S, Na S, Song HY;
 XX WPI; 1999-458680/38.
 DR N-PSDB; AAX86352.
 XX A vascular endothelial growth factor related protein and related
 PT polynucleotide, useful for identifying antagonists and binding
 PT compounds
 XX Claim 1; Page 56-58; 62pp; English.
 XX The present sequence represents a vascular endothelial growth factor
 CC related (VEGF-R) protein. VEGF-R can be used in assays to identify
 CC compounds that bind to it or that antagonize its activity. VEGF-R
 CC antagonists (e.g. anti-VEGF-R antibodies) are useful for inhibiting
 CC tissue growth. This is useful for inhibiting tumour growth and for
 CC treating cancer. VEGF-R itself can be used to stimulate tissue
 CC growth, angiogenesis and to treat coronary artery blockage. The
 CC VEGF-R coding sequence can be used for the recombinant production of
 CC the VEGF-R protein.
 XX Sequence 345 AA;
 SX
 Query Match 100.0%; Score 597; DB 20; Length 345;
 Best Local Similarity 100.0%; Pred. No. 3.2e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LLTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCQCVPVS 60
 Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 240 llteevrlyscprnfsvsireelkrttdtlfwpgcllvkrccgncacclhncqcvcps 299
 QY 61 KVTKKYHEVLQRLPKTGVRGLHSLTDVALEHHEECDCVCRGSGTG 106
 Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 300 kvtkkyhevlqlrpkgtgvrghlsldvalehheecdcvcrgstgg 345

RESULT 11
 AAB48657
 ID AAB48657 standard; Protein; 345 AA.
 XX
 AC AAB48657;
 XX
 DT 09-MAR-2001 (first entry)
 XX
 DE Human zvegfg3, SEQ ID NO:33.
 XX
 KW Human; zvegfg3; zvegfg4 fusion; growth factor homologue; VEGF/PDGF family;
 KW CUB domain; PDGF-like activity; mitogenic; osteogenic;
 KW neovascularisation; tissue repair; proliferation; differentiation;
 KW liver damage; neurodegenerative; Alzheimer's disease; multiple sclerosis;
 KW periodontal disease; bone fracture; wound healing; vulnery; ischaemia;
 KW immunomodulation; hepatic.
 XX
 OS Homo sapiens.
 XX
 PN W0200066736-A1.
 XX
 PD 09-NOV-2000.
 XX
 PF 03-MAY-2000; 2000WO-US40047.
 XX
 XX 03-MAY-1999; 99US-0304216.

PR 10-NOV-1999; 99US-0164463.
 PR 04-FEB-2000; 2000US-0180169.
 XX (ZYMO) ZYMOGENETICS INC.
 XX Gilbert T, Hart CE, Sheppard PO, Gilbertson DG;
 XX WPI; 2000-687541/67.
 DR N-PSDB; AAC81582.
 XX Growth factor homologs and the nucleic acids that encode them, useful
 PT e.g. for treating liver damage, ischemia, multiple sclerosis and
 PT Alzheimer's disease
 XX
 PS Claim 48; Page 125-126; 143pp; English.
 XX The invention relates to the human growth factor homologue zvegfg4
 CC (AAB48653), and nucleic acids encoding it (AAC81555). zvegfg4 is a member
 CC of the PDGF (platelet-derived growth factor)/VEGF (vascular endothelial
 CC growth factor) family. zvegfg4 has a growth factor domain (AAB48634)
 CC characterised by a PDGF cysteine knot structure, and a CUB domain
 CC (AAB48655) which has a beta barrel structure. zvegfg4 has PDGF-like
 CC activity, having mitogenic activity on fibroblasts, vascular smooth
 CC muscle cells and pericytes, and has also been shown to stimulate bone
 CC growth. The invention also relates to fusion proteins comprising human
 CC zvegfg4 or fragments thereof, particularly human zvegfg4/human zvegfg3
 CC fusions; expression constructs and host cells comprising human zvegfg4
 CC nucleic acids; the recombinant expression of human zvegfg4; an antibody
 CC which binds to human zvegfg4 or a fragment thereof; a method of activating
 CC a cell-surface PDGF receptor using a zvegfg4-derived polypeptide; a
 CC method of modulating the proliferation, differentiation, migration or
 CC metabolism of bone cells, comprising exposing bone cells to
 CC zvegfg4-derived polypeptides; and a method of detecting a genetic
 CC abnormality in the zvegfg4 gene of a patient. zvegfg4 proteins and derived
 CC fragments may be used to stimulate tissue development or repair, or
 CC cellular differentiation or proliferation. They are particularly used for
 CC the treatment or repair of liver damage, and may also be used to
 CC modulate neurite growth (e.g., in the treatment of Alzheimer's disease or
 CC multiple sclerosis). Due to their osteogenic activity, they may be used
 CC in the treatment of periodontal disease and fractures. They may also be
 CC used to enhance expansion and mobilisation of haematopoietic stem cells
 CC and endothelial precursor stem cells, which may be useful in the
 CC treatment of ischaemia, in wound healing, and in the modulation of the
 CC immune system. The present sequence represents human zvegfg3.
 XX
 SX Sequence 345 AA;
 Query Match 100.0%; Score 597; DB 21; Length 345;
 Best Local Similarity 100.0%; Pred. No. 3.2e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LLTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCQCVPVS 60
 Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 240 llteevrlyscprnfsvsireelkrttdtlfwpgcllvkrccgncacclhncqcvcps 299
 QY 61 KVTKKYHEVLQRLPKTGVRGLHSLTDVALEHHEECDCVCRGSGTG 106
 Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 300 kvtkkyhevlqlrpkgtgvrghlsldvalehheecdcvcrgstgg 345

RESULT 12
 AAB24250
 ID AAB24250 standard; Protein; 345 AA.
 XX
 AC AAB24250;
 XX
 DT 08-FEB-2001 (first entry)
 XX
 DE Human platelet-derived growth factor related protein LP8.
 XX
 KW Human; platelet derived growth factor related protein; LP8; VEGFh;
 KW vascular endothelial growth factor h; tissue regeneration; vulnery;

KW atherosclerosis; PDGF-related protein; antiarteriosclerotic.

XX Homo sapiens.

XX WO200059940-A2.

XX 12-OCT-2000.

XX 24-MAR-2000; 2000WO-US06427.

XX 06-APR-1999; 99US-0127913.

XX (ELIL) LILLY & CO ELI.

XX Hammond LJ, Na S;

XX WPI: 2000-664991/64.

XX N-PSDB; AAC64426.

XX Enhancing tissue growth and promoting wound healing by administering platelet-derived growth factor related protein, LP8 or its analog and treating atherosclerosis by administering LP8 antagonist

XX Claim 4; Page 63-64; 64pp; English.

XX The present invention describes a method for enhancing tissue growth, promoting wound healing or stimulating smooth muscle growth by administering a platelet-derived growth factor (PDGF) related protein, designated LP8 or its analogue. Also described is a method of slowing the progress of atherosclerosis or treating atherosclerosis comprising the administration of an LP8 antagonist. The method is useful for enhancing tissue growth, promoting wound healing and stimulating smooth muscle growth. Antagonists of LP8 are useful for treating atherosclerosis. The present sequence represents human LP8, which is also called VEGFh.

XX Sequence 345 AA;

Query Match 100.0%; Score 597; DB 21; Length 345;

Best Local Similarity 100.0%; Pred. No. 3.2e-54;

Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQVPS 60

Db 240 LITEEVLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQVPS 299

QY 61 KVTKKYHEVLQRLPKTGVRGLKSLTDVALEHHEEDCVCGRSTGG 106

Db 300 KVTKKYHEVLQRLPKTGVRGLKSLTDVALEHHEEDCVCGRSTGG 345

RESULT 13

AAB44322

ID AAB44322 standard; Protein; 345 AA.

XX AAB44322;

XX 08-FEB-2001 (first entry)

XX Human PRO200 (UNQ174) protein sequence SEQ ID NO:488.

XX Human; secreted protein; transmembrane protein; PRO; EST; cytotstatic;

XX expressed sequence tag; detection; cancer.

XX Homo sapiens.

XX WO200053756-A2.

XX 14-SEP-2000.

XX 18-FEB-2000; 2000WO-US04341.

PR 08-MAR-1999; 99WO-US05028.

PR 12-MAR-1999; 99US-0123957.

PR 29-MAR-1999; 99US-0126773.

PR 21-APR-1999; 99US-0130232.

PR 28-APR-1999; 99US-0131445.

PR 14-MAY-1999; 99US-0134287.

PR 23-JUN-1999; 99US-0141037.

PR 26-JUL-1999; 99US-0145698.

PR 29-OCT-1999; 99US-0162506.

PR 30-NOV-1999; 99WO-US28313.

PR 02-DEC-1999; 99WO-US28551.

PR 02-DEC-1999; 99WO-US28565.

PR 16-DEC-1999; 99WO-US30095.

PR 30-DEC-1999; 99WO-US31243.

PR 30-DEC-1999; 99WO-US31274.

PR 05-JAN-2000; 2000WO-US00219.

PR 06-JAN-2000; 2000WO-US00277.

PR 06-JAN-2000; 2000WO-US00376.

XX (GETH) GENENTECH INC.

XX Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;

XX Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;

XX Goddard A, Godowski PJ, Grimaldi CJ, Gurney AU, Hillan KJ;

XX Kijavir IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA;

XX Shelton DL, Stewart TA, Tumas D, Williams PM, Wood WI;

XX WPI: 2000-611443/58.

XX N-PSDB; AAC78582.

XX Novel PRO polypeptides and polynucleotides used in detection methods,

XX to target bioactive molecules to specific cells, and to modulate

XX cellular activities

XX Claim 12; Fig 207; 636pp; English.

XX AAC78458 to AAC78599 represent polynucleotide and EST (expressed

QY 1 LITEEVLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQVPS 60

Db 240 LITEEVLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQVPS 299

QY 61 KVTKKYHEVLQRLPKTGVRGLKSLTDVALEHHEEDCVCGRSTGG 106

Db 300 KVTKKYHEVLQRLPKTGVRGLKSLTDVALEHHEEDCVCGRSTGG 345

Query Match 100.0%; Score 597; DB 21; Length 345;

Best Local Similarity 100.0%; Pred. No. 3.2e-54;

Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQVPS 60

Db 240 LITEEVLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQVPS 299

QY 61 KVTKKYHEVLQRLPKTGVRGLKSLTDVALEHHEEDCVCGRSTGG 106

Db 300 KVTKKYHEVLQRLPKTGVRGLKSLTDVALEHHEEDCVCGRSTGG 345

RESULT 14

AAB10633

ID AAB10633 standard; Protein; 345 AA.

XX AAB10633;

XX 19-JAN-2001 (first entry)

XX Human RACE generated VEGF-X protein.

XX VEGF-X; vascular endothelial growth factor; human; vulnery; cytostatic;
 KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
 KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
 KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
 KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
 KW venous sore; diabetic ulcer; burns; skin graft growth.
 XX Homo sapiens.
 OS
 XX
 PN WO200037641-A2.
 XX
 PD 29-JUN-2000.
 XX
 PF 21-DEC-1999; 99WO-US30503.
 XX
 PR 22-DEC-1998; 98GB-0028377.
 PR 18-MAR-1999; 99US-0124967.
 PR 08-NOV-1999; 99US-0164131.
 XX
 XX (JANC) JANSSEN PHARM NV.
 PA
 XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;
 PI Dhanaraj SN, Xu J;
 XX WPI; 2000-442669/38.
 DR N-PSDB; AAA71951.

XX New vascular endothelial growth factor protein, useful for treating or
 PT preventing diseases associated with inappropriate angiogenesis activity
 PT such as cancer, rheumatoid arthritis, psoriasis and wounds -
 XX
 PS Disclosure; Fig 6; 127pp; English.

XX This invention describes a novel vascular endothelial growth factor-X
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
 CC vulnery, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
 CC antidiabetic activity and acts as an angiogenesis and vascularization
 CC regulator. An antisense molecule of the invention is useful for treating
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
 CC retinopathy by inhibiting angiogenic activity or inappropriate
 CC vascularization including formation and proliferation of new blood
 CC vessels, growth and development of tissues, tissue regeneration and organ
 CC and tissue repair in a subject. The products of the invention are useful
 CC for preparing medicaments for treating wounds such as dermal ulcers,
 CC pressure sores, venous sores, diabetic ulcers and burns and to promote
 CC skin graft growth, tissue repair, proliferation of new blood vessels,
 CC tissue regeneration and organ repair by promoting angiogenic activity or
 CC vascularization. This sequence represents the RACE generated human VEGF-X
 CC protein described in the method of the invention.

XX Sequence 345 AA;

Query Match 100.0%; Score 597; DB 21; Length 345;
 Best Local Similarity 100.0%; Pred. No. 3.2e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVRLYSCTPRNFSVIREELKRTDTIFWPGLLVKRCGNCACCLHNCNEQCQVPS 60
 Db 240 lltteevrlyscprnfsvireelkrttdtlfwpgcllvkrcgncacclhncncqcqvps 299

QY 61 KVTKKYHEVLQLRPKTGVRLHKSITDVALEHHEECDCVCRGSTGG 106
 Db 300 kvtkkyhevlqlrpkgtvrglhksitdvalhehheecdcvcrgstgg 345

RESULT 15
 AAB10634
 ID AAB10634 standard; Protein; 345 AA.
 XX
 AC AAB10634;
 XX

DT 19-JAN-2001 (first entry)
 XX Human VEGF-X homologue protein.
 DE
 XX VEGF-X; vascular endothelial growth factor; human; vulnery; cytostatic;
 KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
 KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
 KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
 KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
 KW venous sore; diabetic ulcer; burns; skin graft growth.
 XX Homo sapiens.
 OS
 XX
 PN WO200037641-A2.
 XX
 PD 29-JUN-2000.
 XX
 PF 21-DEC-1999; 99WO-US30503.
 XX
 PR 22-DEC-1998; 98GB-0028377.
 PR 18-MAR-1999; 99US-0124967.
 PR 08-NOV-1999; 99US-0164131.
 XX
 XX (JANC) JANSSEN PHARM NV.
 PA
 XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;
 PI Dhanaraj SN, Xu J;
 XX WPI; 2000-442669/38.
 DR N-PSDB; AAA71952.

XX New vascular endothelial growth factor protein, useful for treating or
 PT preventing diseases associated with inappropriate angiogenesis activity
 PT such as cancer, rheumatoid arthritis, psoriasis and wounds -
 XX
 PS Disclosure; Fig 7; 127pp; English.

XX This invention describes a novel vascular endothelial growth factor-X
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
 CC vulnery, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
 CC antidiabetic activity and acts as an angiogenesis and vascularization
 CC regulator. An antisense molecule of the invention is useful for treating
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
 CC retinopathy by inhibiting angiogenic activity or inappropriate
 CC vascularization including formation and proliferation of new blood
 CC vessels, growth and development of tissues, tissue regeneration and organ
 CC and tissue repair in a subject. The products of the invention are useful
 CC for preparing medicaments for treating wounds such as dermal ulcers,
 CC pressure sores, venous sores, diabetic ulcers and burns and to promote
 CC skin graft growth, tissue repair, proliferation of new blood vessels,
 CC tissue regeneration and organ repair by promoting angiogenic activity or
 CC vascularization. This sequence represents the human VEGF-X protein
 CC homologue described in the method of the invention.

XX Sequence 345 AA;

Query Match 100.0%; Score 597; DB 21; Length 345;
 Best Local Similarity 100.0%; Pred. No. 3.2e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVRLYSCTPRNFSVIREELKRTDTIFWPGLLVKRCGNCACCLHNCNEQCQVPS 60
 Db 240 lltteevrlyscprnfsvireelkrttdtlfwpgcllvkrcgncacclhncncqcqvps 299

QY 61 KVTKKYHEVLQLRPKTGVRLHKSITDVALEHHEECDCVCRGSTGG 106
 Db 300 kvtkkyhevlqlrpkgtvrglhksitdvalhehheecdcvcrgstgg 345

Search completed: May 24, 2002, 09:58:18
 Job time: 332 sec

GenCore version 4.5

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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:56:16 ; Search time 13.01 Seconds
(without alignments)
199,009 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345

Perfect score: 597

Sequence: 1 LLTEVRLYSCPTPNFVSIVSI.....DVALEHHEDCVCRGSGTG 106

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA: *

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2: /cgn2.6/ptodata/2/iaa/5B_COMB.pep:*

3: /cgn2.6/ptodata/2/iaa/6A_COMB.pep:*

4: /cgn2.6/ptodata/2/iaa/6B_COMB.pep:*

5: /cgn2.6/ptodata/2/iaa/PCTUS_COMB.pep:*

6: /cgn2.6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	115.5	19.3	321	4	US-08-915-795-9
2	115.5	19.3	358	4	US-08-915-795-8
3	111.5	18.7	325	4	US-08-915-795-3
4	111.5	18.7	354	4	US-08-915-795-5
5	105	17.6	109	1	US-08-094-079-2
6	105	17.6	109	1	US-08-094-079-3
7	105	17.6	109	2	US-08-804-953-3
8	105	17.6	109	3	US-08-691-794-4
9	105	17.6	109	5	PCT-US91-02766-18
10	105	17.6	109	5	PCT-US93-02612-1
11	105	17.6	109	6	5498600-3
12	105	17.6	119	2	US-08-257-494D-1
13	105	17.6	120	6	5428135-2
14	105	17.6	146	3	US-08-989-251-2
15	105	17.6	146	3	US-08-989-251-25
16	105	17.6	146	3	US-09-340-250-2
17	105	17.6	146	3	US-09-340-250-25
18	105	17.6	146	4	US-09-528-108-2
19	105	17.6	146	4	US-09-528-108-25
20	105	17.6	160	1	US-08-094-079-1
21	105	17.6	188	1	US-08-469-427A-11
22	105	17.6	188	2	US-08-609-443B-11
23	105	17.6	188	2	US-08-569-063C-11
24	105	17.6	188	4	US-08-795-430-57
25	105	17.6	190	3	US-08-867-352-25
26	105	17.6	205	3	US-08-989-251-27
27	105	17.6	205	3	US-08-989-251-37

28 105 17.6 205 3 US-09-340-250-27 Sequence 27, Appl
29 105 17.6 205 3 US-09-340-250-37 Sequence 37, Appl
30 105 17.6 205 4 US-09-528-108-27 Sequence 27, Appl
31 105 17.6 205 4 US-09-528-108-37 Sequence 37, Appl
32 105 17.6 207 2 US-08-609-443B-15 Sequence 15, Appl
33 105 17.6 207 2 US-08-569-063C-15 Sequence 15, Appl
34 105 17.6 220 6 5175255-4 Patent No. 5175255
35 105 17.6 241 1 US-08-387-845-4 Sequence 4, Appl
36 105 17.6 241 2 US-08-999-811-6 Sequence 6, Appl
37 105 17.6 241 2 US-08-778-275-4 Sequence 4, Appl
38 105 17.6 241 2 US-08-824-996-8 Sequence 8, Appl
39 105 17.6 241 3 US-08-989-251-29 Sequence 29, Appl
40 105 17.6 241 3 US-09-042-105-6 Sequence 6, Appl
41 105 17.6 241 3 US-08-867-352-4 Sequence 4, Appl
42 105 17.6 241 3 US-09-340-250-29 Sequence 29, Appl
43 105 17.6 241 4 US-08-795-430-54 Sequence 54, Appl
44 105 17.6 241 4 US-09-528-108-29 Sequence 29, Appl
45 105 17.6 241 5 PCT-US96-09001-9 Sequence 9, Appl

ALIGNMENTS

RESULT 1
US-08-915-795-9
; Sequence 9, Application US/08915795
; Patent No. 6235713
; GENERAL INFORMATION:
; APPLICANT: Marc G. ACHEN
; APPLICANT: Andrew F. WILKS
; APPLICANT: Steven A. STACKER
; APPLICANT: Karl ALITALO
; TITLE OF INVENTION: GROWTH FACTOR
; NUMBER OF SEQUENCES: 11
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Evenson, McKeown, Edwards & Lenahan P.L.L.C.
; STREET: 1200 G Street, NW, Suite 700
; CITY: Washington
; STATE: DC
; COUNTRY: United States of America
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/915,795
; FILING DATE:
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: EVANS, Joseph D.
; REGISTRATION NUMBER: 26,269
; REFERENCE/DOCKET NUMBER: 1064/42983
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 628-8800
; TELEFAX: (202) 628-8844
; TELEX: N/A
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 321 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; TISSUE TYPE: Mouse Lung
; US-08-915-795-9

Query Match 19.3%; Score 115.5; DB 4; Length 321;
Best Local Similarity 33.0%; Pred. No. 4.8e-05;
Matches 35; Conservative 15; Mismatches 41; Indels 15; Gaps 6;

RESULT 3
US-08-915-795-3
: Sequence 3, Application US/08915795

RESULT 4
US-08-915-795-5
Sequence 5, Application US/08915795
Patent No. 6235713
GENERAL INFORMATION:
APPLICANT: Marc G. ACHEN
APPLICANT: Andrew F. WILKS
APPLICANT: Steven A. STACKER
APPLICANT: Karl ALITALO
TITLE OF INVENTION: GROWTH FACTOR
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Evenson, McKeown, Ed
STREET: 1200 G Street, NW, Suit
CITY: Washington

STATE: DC
COUNTRY: United States of America
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/915.795
FILING DATE:
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: EVANS, Joseph D.
REGISTRATION NUMBER: 26,269
REFERENCE/DOCKET NUMBER: 1064/42983
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 628-8800
TELEFAX: (202) 628-8844
TELEX: N/A
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 354 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
TISSUE TYPE: Human Lung
US-08-915-795-5

Query Match 18.7%; Score 111.5; DB 4; Length 354;
Best Local Similarity 32.7%; Pred. No. 0.00014;
Matches 33; Conservative 14; Mismatches 43; Indels 11; Gaps 5;

QY 1 LITEVRLVSCPTPRNFSVIREL-KRTDTIWPGLLVKRGCGNACCLHNCNEC-QCV 58
DB 101 VIDEWQRTQCSPTRECVASELGLSTNFTFKPPCVNFCRGG---CCNESLIMNTS 157
QY 59 PSKVTKKYHEVLQRLKPTGVRGLHKSLLTDVALEHHEECDCV 99
DB 158 TSVSKQLFEISV--PLTSV----PELVVPKVNHTGCKCL 192

RESULT 5
US-08-094-079-2
Sequence 2, Application US/08094079
Patent No. 5512545
GENERAL INFORMATION:
APPLICANT: COOK, Anne L
APPLICANT: CRAIG, Stewart
APPLICANT: CLEMENTS, John M
APPLICANT: EDWARDS, Richard M
APPLICANT: BROWN, David
TITLE OF INVENTION: PDGF-B ANALOGUES
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Allegretti & Witcoff, Ltd.
STREET: 10 S. Wacker Dr.
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/094,079
FILING DATE: 24-JAN-1992

CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/GB92/00141
FILING DATE: 24-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9101645.1
FILING DATE: 24-JAN-1991
ATTORNEY/AGENT INFORMATION:
NAME: McDonnell, John J
REGISTRATION NUMBER: 26,949
REFERENCE/DOCKET NUMBER: 93,640
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-715-1000
TELEFAX: 312-715-1234
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY: Protein
LOCATION: 1..109
OTHER INFORMATION: /note= "Truncated PDGF-B (PDGF-Bt)"
US-08-094-079-2

Query Match 17.6%; Score 105; DB 1; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

QY 2 LFEVRLVSCPTPRN--FVSIREELKRTDTIF--WPGCLLVKRGCGNACCLHNCNECQC 57
DB 7 IAEPAIAIECKTRTEVEFIS--RRLIDRTNANELVWPVPCVEVQRCSG---CC--NNRNVC 60
QY 58 VPSKVTKKYHEVLQRLP-----KTGV---RGLHKSLLTDVALEHHEECDC 98
DB 61 RPTQV-----QURPVQVRKIEIVRKRPFKKAT-VTLEDHLACKC 99

RESULT 6
US-08-094-079-3
Sequence 3, Application US/08094079
Patent No. 5512545
GENERAL INFORMATION:
APPLICANT: COOK, Anne L
APPLICANT: CRAIG, Stewart
APPLICANT: CLEMENTS, John M
APPLICANT: EDWARDS, Richard M
APPLICANT: BROWN, David
TITLE OF INVENTION: PDGF-B ANALOGUES
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Allegretti & Witcoff, Ltd.
STREET: 10 S. Wacker Dr.
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/094,079
FILING DATE: 24-JAN-1992
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/GB92/00141
FILING DATE: 24-JAN-1992
PRIOR APPLICATION DATA:

APPLICATION NUMBER: GB 9101645.1
FILING DATE: 24-JAN-1991
ATTORNEY/AGENT INFORMATION:
NAME: McDonnell, John J.
REGISTRATION NUMBER: 26,949
REFERENCE/DOCKET NUMBER: 93,640
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-715-1000
TELEFAX: 312-715-1234
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY: Protein
LOCATION: 1..109
OTHER INFORMATION: /note= "Truncated PDGF-B with ARG
OTHER INFORMATION: 28 > SER (PDGF-B5)"
US-08-094-079-3

Query Match 17.6%; Score 105; DB 1; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

QY 2 LTEVRLYSCPTPN--FSVSIREELKRTDTIF--WPGCLLVKRCGNCACCLHNCQC 57
Db 7 IAEPMIAECKTTEVFEIS--RSLDRTNANFLWPPCPEVQRCSG---CC--NNRNVC 60
QY 58 VPSKVTKYHEVLQLRP---KTGV---RGLHKS LTDVALEHHECDC 98
Db 61 RPTQV-----QLRPVQVRKIEIVRKPIFKKAT-VTLEDHLACKC 99

RESULT 7
US-08-804-953-3
Sequence 3, Application US/08804953
Patent No. 5968778
GENERAL INFORMATION:
APPLICANT: Hoppe, Jurgen
APPLICANT: Welch, Herbert
TITLE OF INVENTION: PDGF-A, PDGF-AA, PDGF-AB,
TITLE OF INVENTION: PREPARATION PROCESS AND
TITLE OF INVENTION: PHARMACEUTICALS CONTAINING
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Joseph T. Eisele
ADDRESSEE: Kane, Dalsimer, Sullivan, Kurucz,
ADDRESSEE: Levy, Eisele and Richard
STREET: 711 Third Avenue
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10017-4059
COMPUTER READABLE FORM:
MEDIUM TYPE: 3-1/2" DISKETTE
COMPUTER: IBM-XT COMPATIBLE
OPERATING SYSTEM: DOS 3.3
SOFTWARE: WORDPERFECT 5.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/804,953
FILING DATE: 24-FEB-1997
CLASSIFICATION: 257
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/720,771
FILING DATE: 08/07/91
APPLICATION NUMBER: PCT/EP90/00063
FILING DATE: 01/11/90
ATTORNEY/AGENT INFORMATION:

NAME: EISELE, JOSEPH T.
REGISTRATION NUMBER: 25,331
REFERENCE/DOCKET NUMBER: 2727-56 PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 687-6000
TELEFAX: (212) 682-3485
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 residues
TYPE: amino acid
STRANDEDNESS: N/A
TOPOLOGY: linear
MOLECULE TYPE: Protein
HYPOTHETICAL: Yes
ANTI-SENSE: No
FRAGMENT TYPE:
ORIGINAL SOURCE:
ORGANISM:
STRAIN: E. Coli
INDIVIDUAL ISOLATE:
DEVELOPMENTAL STAGE:
HAPLOTYPE:
TISSUE TYPE:
CELL TYPE:
CELL LINE:
ORGANELLE:
IMMEDIATE SOURCE:
CLONE: PDGF-A
FEATURE:
OTHER INFORMATION:
US-08-804-953-3

Query Match 17.6%; Score 105; DB 2; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

QY 2 LTEVRLYSCPTPN--FSVSIREELKRTDTIF--WPGCLLVKRCGNCACCLHNCQC 57
Db 7 IAEPMIAECKTTEVFEIS--RSLDRTNANFLWPPCPEVQRCSG---CC--NNRNVC 60
QY 58 VPSKVTKYHEVLQLRP---KTGV---RGLHKS LTDVALEHHECDC 98
Db 61 RPTQV-----QLRPVQVRKIEIVRKPIFKKAT-VTLEDHLACKC 99

RESULT 8
US-08-691-794-4
Sequence 4, Application US/08691794
Patent No. 6057428
GENERAL INFORMATION:
APPLICANT: Keyt, Bruce A.
APPLICANT: Nguyen, Francis H.
APPLICANT: Ferrara, Napoleone
APPLICANT: Cunningham, Brian C.
APPLICANT: Wells, James A.
APPLICANT: Li, Bing
TITLE OF INVENTION: Variants of Vascular Endothelial Cell
TITLE OF INVENTION: Growth Factor, their Uses, and Processes for their
TITLE OF INVENTION: Production
NUMBER OF SEQUENCES: 45
CORRESPONDENCE ADDRESS:
ADDRESSEE: Flehr, Hobbach, Test, Albritton & Herbert
STREET: Four Embarcadero Center, Suite 3400
CITY: San Francisco
STATE: California
COUNTRY: United States
ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/691,794
FILING DATE: 02-AUG-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/002,827
FILING DATE: 25-AUG-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/567,200
FILING DATE: 05-DEC-1995
ATTORNEY/AGENT INFORMATION:
NAME: Dreger, Walter H.
REGISTRATION NUMBER: 24,190
REFERENCE/DOCKET NUMBER: A-63758/WHD
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 781-1989
TELEFAX: (415) 398-3249
TELEX: 910 277299
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
US-08-691-794-4

Query Match 17.6%; Score 105; DB 3; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;
QY 2 LTEEVRLYSCPTRN--FSVSIREELKRTDTIF--WPGCLLVKRCGNCACCLHNCNECQC 57
Db 7 IAEPMIAECKTTEVFEIS--RLIDRTNANFLVWPVPCVEVQRCSG---CC--NNRNVC 60
QY 58 VPSKVTKYHYEVQLRPP-----RTGV---RGLHKSITDVALEHHEECDC 98
Db 61 RPTQV-----QLRPVQVRKIEIVRKPKPKKAT-VTLEDHLACKC 99

RESULT 9
PCT-US91-02766-18
Sequence 18, Application PC/TUS9102766
GENERAL INFORMATION:
APPLICANT: NASCIMENTO, CARLOS G.
APPLICANT: CALDERON-CACIA, MARIA D.
TITLE OF INVENTION: GLYCOSTYLATED PDGF
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Irell & Manella
STREET: 545 Middlefield Road, Suite 200
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US91/02766
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/515,474
FILING DATE: 26-APR-1990
ATTORNEY/AGENT INFORMATION:
NAME: ROBINS, ROBERTA L.
REGISTRATION NUMBER: 33,208
REFERENCE/DOCKET NUMBER: 2300-0105.40

TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 327-7250
TELEFAX: (415) 327-2951
TELEX: 706141
INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US91-02766-18

Query Match 17.6%; Score 105; DB 5; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;
QY 2 LTEEVRLYSCPTRN--FSVSIREELKRTDTIF--WPGCLLVKRCGNCACCLHNCNECQC 57
Db 7 IAEPMIAECKTTEVFEIS--RLIDRTNANFLVWPVPCVEVQRCSG---CC--NNRNVC 60
QY 58 VPSKVTKYHYEVQLRPP-----RTGV---RGLHKSITDVALEHHEECDC 98
Db 61 RPTQV-----QLRPVQVRKIEIVRKPKPKKAT-VTLEDHLACKC 99

RESULT 10
PCT-US93-02612-1
Sequence 1, Application PC/TUS9302612
GENERAL INFORMATION:
APPLICANT: Cable, Michael
APPLICANT: Hesson, Thomas
APPLICANT: Mannarino, Anthony
TITLE OF INVENTION: Monomeric Platelet-Derived Growth Factor and Prevention of
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Schering-Plough Corporation
STREET: One Girarda Farms
CITY: Madison
STATE: New Jersey
COUNTRY: USA
ZIP: 07940
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 6.0.5
SOFTWARE: Microsoft Word 4.00B
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/02612
FILING DATE: 19930326
CLASSIFICATION:
PRIOR APPLICATION DATA: None
ATTORNEY/AGENT INFORMATION:
NAME: Lunn, Paul, G.
REGISTRATION NUMBER: 32,743
REFERENCE/DOCKET NUMBER: JB0255
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-822-7255
TELEFAX: 201-822-7039
TELEX: 219165
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: peptide
PCT-US93-02612-1

Query Match 17.6%; Score 105; DB 5; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

STEM

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0;
26; Gaps
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|      ||
-NRRNVQC 61

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RESULT 14
US-08-989-251-2

; Sequence 2, Application US/08989251
; Patent No. 6017731
; GENERAL INFORMATION:
; APPLICANT: Tekamp-Olson, Patricia
; TITLE OF INVENTION: METHOD FOR EXPRESSION OF HETEROLOGOUS
; TITLE OF INVENTION: PROTEINS IN YEAST
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell Seltzer IP Group of Alston & Bird, LLP
; STREET: 3605 Glenwood Ave. Suite 310
; CITY: Raleigh
; STATE: NC
; COUNTRY: US
; ZIP: 27622
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/989,251
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Spruill, W. Murray
; REGISTRATION NUMBER: 32,943
; REFERENCE/DOCKET NUMBER: 5784-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919 420 2202
; TELEFAX: 919 881 3175
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 146 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-989-251-2

Query Match 17.6%; Score 105; DB 3; Length 146;
Best Local Similarity 33.3%; Pred. No. 0.00027;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;
QY 2 LTEEVLISCTPRN--FSVSIREELKRTDTIF--WPGCLLVKRCGGNCACCLHNCQC 57
Db 44 IAEPAIAECKTRTEVFEIS--RLIDRTNANFLVWPVCEVQRCSG---CC---NNRNVC 97
QY 58 VPSKVTKKYHEVLQLRP---KTGV---RGLHKSLTDVALEHHEECDC 98
Db 98 RPTQV-----QLRPVQVRKIEIVRKPIFKKAT-VTLEDHLACKC 136

RESULT 15
US-08-989-251-25
; Sequence 25, Application US/08989251
; Patent No. 6017731
; GENERAL INFORMATION:
; APPLICANT: Tekamp-Olson, Patricia
; TITLE OF INVENTION: METHOD FOR EXPRESSION OF HETEROLOGOUS
; TITLE OF INVENTION: PROTEINS IN YEAST
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell Seltzer IP Group of Alston & Bird, LLP
; STREET: 3605 Glenwood Ave. Suite 310
; CITY: Raleigh
; STATE: NC
; COUNTRY: US
; ZIP: 27622
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/989,251
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Spruill, W. Murray
; REGISTRATION NUMBER: 32,943
; REFERENCE/DOCKET NUMBER: 5784-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919 420 2202
; TELEFAX: 919 881 3175
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 146 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-989-251-25
Query Match 17.6%; Score 105; DB 3; Length 146;
Best Local Similarity 33.3%; Pred. No. 0.00027;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;
QY 2 LTEEVLISCTPRN--FSVSIREELKRTDTIF--WPGCLLVKRCGGNCACCLHNCQC 57
Db 44 IAEPAIAECKTRTEVFEIS--RLIDRTNANFLVWPVCEVQRCSG---CC---NNRNVC 97
QY 58 VPSKVTKKYHEVLQLRP---KTGV---RGLHKSLTDVALEHHEECDC 98
Db 98 RPTQV-----QLRPVQVRKIEIVRKPIFKKAT-VTLEDHLACKC 136
Search completed: May 24, 2002, 09:58:38
Job time: 142 sec

GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 24, 2002, 09:56:36 ; Search time 16.43 Seconds
(without alignments)
619.931 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345

Perfect score: 597
Sequence: 1 LLTEEVRLYSCTPRNFSVSI.....DVALEHHECDVCRGSTGG 106

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283138 seqs, 96089334 residues

Total number of hits satisfying chosen parameters: 283138

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_71.*
1: pir1.*
2: pir2.*
3: pir3.*
4: pir4.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	305.5	51.2	370	2	JC7591 spinal cord-derive
2	305.5	51.2	370	2	JC7592 spinal cord-derive
3	114.5	19.2	148	2	D49530 16K vascular endot
4	108	18.1	166	2	JN0248 platelet-derived g
5	108	18.1	198	2	J50735 platelet-derived g
6	105	17.6	200	2	I51551 platelet-derived g
7	105	17.6	215	2	S08220 platelet-derived g
8	105	17.6	226	2	I51550 platelet-derived g
9	105	17.6	241	1	PFHUG2 platelet-derived g
10	105	17.6	245	1	TVCTSS platelet-derived g
11	104.5	17.5	232	2	A41551 vascular endotheli
12	104	17.4	196	2	B28964 platelet-derived g
13	104	17.4	197	2	S25096 platelet-derived g
14	104	17.4	211	1	PFHUG1 platelet-derived g
15	104	17.4	226	1	TVMVSS PDGF-related trans
16	102.5	17.2	133	2	B49530 vascular endotheli
17	102.5	17.2	190	2	S21330 vascular endotheli
18	102.5	17.2	196	2	A37359 platelet-derived g
19	102.5	17.2	196	2	A48851 platelet-derived g
20	101.5	17.0	120	2	A33787 vascular endotheli
21	101.5	17.0	146	2	S57956 ovine vascular end
22	101.5	17.0	190	2	B40080 vascular endotheli
23	100.5	16.8	419	2	S92907 vascular endotheli
24	97	16.2	188	2	JC4680 vascular endotheli
25	97	16.2	207	2	JC4679 vascular endotheli
26	96.5	16.2	190	2	A35987 glioma-derived vas
27	95.5	16.0	190	2	B44881 vascular endotheli
28	95.5	16.0	214	2	B44881 vascular endotheli
29	94	15.7	225	2	S25097 platelet-derived g

ALIGNMENTS

RESULT 1

JC7591
spinal cord-derived growth factor-B precursor - human
C:Species: Homo sapiens (man)
C:Date: 30-Jun-2001 #sequence_revision 30-Jun-2001 #text_change 24-Aug-2001
C:Accession: JC7591
R:Hamada, T.; Ui-Tei, K.; Imaki, J.; Miyata, Y.
Biochem. Biophys. Res. Commun. 280, 733-737, 2001
A:Title: Molecular cloning of SCDGF-B, a novel growth factor homologous to SCDGF/PDGF
A:Reference number: JC7591; MUID:21092670; PMID:11162582
A:Accession: JC7591
A:Molecule type: DNA
A:Residues: 1-370 <HAM>
A:Cross-references: DDBJ:AB033832
C:Genetics:
A:Gene: scdgf-b
F:1-17/Domain: secretory signal sequence #status predicted <SIG>
F:18-370/Product: spinal cord-derived growth factor-B #status predicted <MAT>
F:52-170/Region: CUB domain #status predicted
F:272-370/Region: homologous to platelet-derived growth factor/vascular endothelial g
F:294-308/Region: conserved motif #status predicted

Query Match 51.2%; Score 305.5; DB 2; Length 370;

Best Local Similarity 52.9%; Pred. No. 8.4e-23;

Matches 54; Conservative 13; Mismatches 32; Indels 3; Gaps 1;

Qy 2 LTEEVRLYSCTPRNFSVSIRESLKRDTDFWPGCLLVKRCGNCACCLHNCNECOCVPSK 61

Db 263 LNDDAKRYSCTPRNYSVNIRESLKLANYVFFPRCLLVQRCGNCGCTVNWRSCTCNSGK 322

Qy 62 VTKKYHEVLQLRP---KTGVRGLKSLTDVALEHHECDVC 100

Db 323 TVKKYHEVLQFEFGHKRGRKTMALVDIQDHHERCDCIC 364

RESULT 2

JC7592
spinal cord-derived growth factor-B precursor - rat

C:Species: Rattus norvegicus (Norway rat)

C:Date: 30-Jun-2001 #sequence_revision 30-Jun-2001 #text_change 24-Aug-2001

C:Accession: JC7592

R:Hamada, T.; Ui-Tei, K.; Imaki, J.; Miyata, Y.

Biochem. Biophys. Res. Commun. 280, 733-737, 2001

A:Title: Molecular cloning of SCDGF-B, a novel growth factor homologous to SCDGF/PDGF

A:Reference number: JC7591; MUID:21092670; PMID:11162582

A:Contents: Fetal brain

A:Accession: JC7592

A:Molecule type: mRNA

A:Residues: 1-370 <HAM>

A:Cross-references: DDBJ:AB052170

C:Genetics:

A:Gene: sodgf-B
F:1-17/Domain: secretory signal sequence #status predicted <SIG>
F:18-370/Product: spinal cord-derived growth factor-B #status predicted <MAT>
F:52-170/Region: CUB domain #status predicted
F:272-370/Region: homologous to platelet-derived growth factor/vascular endothelial growth factor
F:294-308/Region: conserved motif #status predicted

Query Match 51.2%; Score 305.5; DB 2; Length 370;
Best Local Similarity 52.0%; Pred. No. 8.4e-23;
Matches 53; Conservative 16; Mismatches 30; Indels 3; Gaps 1;

QY 2 LFEVRLYSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPSK 61

Db 263 LNDVVKRYSCPTRNHVNREELKLTNAVFPRCLLVQRCGGNGGTLNWKSCSSGK 322

QY 62 VTKKYEVLQLRP--KTGVRGLHKSLLTDVALEHHEECDCVC 100

Db 323 TVKKYHEVLKFEFGPKRKGAKNALVDIQLDHHERCDCIC 364

RESULT 3

D49530

10k vascular endothelial growth factor homolog A2R - Orf virus

C:Species: Orf virus

C>Date: 07-Apr-1994 #sequence_revision 18-Nov-1994 #text_change 08-Oct-1999

C:Accession: D49530

R:Lyttle, D.J.; Fraser, K.M.; Fleming, S.B.; Mercer, A.A.; Robinson, A.J.

J. Virol. 68, 84-92, 1994

A:Title: Homologs of vascular endothelial growth factor are encoded by the poxvirus orf

A:Reference number: A49530; MUID:94076465

A:Contents: NZ7

A:Accession: D49530

A>Status: preliminary

A:Molecule type: DNA

A:Residues: 1-148 <LYT>

A:Cross-references: GB:S67522; NID:9456900; PIDN:AAH29223.1; PID:9456902

A:Note: sequence extracted from NCBI backbone (NCBIN:141422, NCBIPI:141426)

Query Match 19.2%; Score 114.5; DB 2; Length 148;

Best Local Similarity 30.2%; Pred. No. 0.00032;

Matches 29; Conservative 19; Mismatches 43; Indels 5; Gaps 3;

QY 11 CTPRNFVSIREEL-KRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTYKHYEV 69

Db 46 CRPRDTVVLGEEYPESTNLQINPRCVTVKRCSG---CCNGDQICTAVETNTVTYVSV 102

QY 70 LQLRPKTVGR-GLHKSLLTDVALEHHEECDCVCRGST 104

Db 103 TGVSSSGTNSGVSTNLQIRISVTEHTKDCIGRTTT 138

RESULT 4

JN0248

platelet-derived growth factor chain A3 precursor - rabbit (fragment)

C:Species: Oryctolagus cuniculus (domestic rabbit)

C>Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 27-Jun-1994

C:Accession: JN0248

R:Nakahara, K.; Nishimura, H.; Kuro-o, M.; Takewaki, S.; Iwase, M.; Ohkubo, A.; Yazaki,

Biochem. Biophys. Res. Commun. 184, 811-818, 1992

A:Title: Identification of three types of PDGF-A chain gene transcripts in rabbit vascular

A:Reference number: JN0248; MUID:92246970

A:Accession: JN0248

A:Molecule type: mRNA

A:Residues: 1-166 <NAK>

C:Superfamily: platelet-derived growth factor

F:1-22/Domain: propeptide (fragment) #status predicted <PRO>

F:23-166/Product: platelet-derived growth factor A3 chain #status predicted <MAT>

Query Match 18.1%; Score 108; DB 2; Length 166;

Best Local Similarity 32.3%; Pred. No. 0.0015;

Matches 32; Conservative 14; Mismatches 41; Indels 12; Gaps 6;

QY 11 CTPRNFVSIR-REELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNECQCVPSKVTYKHY 67

Db 31 CKTRTVIIEIPRSQVDPTSANFLINWPPCVVEVKRCTG---CC--NTSSVKCQPSRV---HH 82

QY 68 EYLQLRPKTGVGRGLHKSLLTDVALEHHEECDCVCRGSTGG 106

Db 83 RSVKVAKEVYVRKKPK-LKEVQVRLEEHLECACAASSAG 120

RESULT 5

JS0735

platelet-derived growth factor chain A1 precursor - rabbit

C:Species: Oryctolagus cuniculus (domestic rabbit)

C>Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 27-Jun-1994

C:Accession: JS0735

R:Nakahara, K.; Nishimura, H.; Kuro-o, M.; Takewaki, S.; Iwase, M.; Ohkubo, A.; Yazaki,

Biochem. Biophys. Res. Commun. 184, 811-818, 1992

A:Title: Identification of three types of PDGF-A chain gene transcripts in rabbit vas

A:Reference number: JN0248; MUID:92246970

A:Accession: JS0735

A:Molecule type: mRNA

A:Residues: 1-198 <NAK>

A:Note: this protein corresponds to the endothelial type of human A chain

C:Superfamily: platelet-derived growth factor

F:1-20/Domain: signal sequence #status predicted <SIG>

F:21-89/Domain: propeptide #status predicted <PRO>

F:90-198/Product: platelet-derived growth factor A1 chain #status predicted <MAT>

Query Match 18.1%; Score 108; DB 2; Length 198;

Best Local Similarity 32.3%; Pred. No. 0.0018;

Matches 32; Conservative 14; Mismatches 41; Indels 12; Gaps 6;

QY 11 CTPRNFVSIR-REELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNECQCVPSKVTYKHY 67

Db 98 CKTRTVIIEIPRSQVDPTSANFLINWPPCVVEVKRCTG---CC--NTSSVKCQPSRV---HH 149

QY 68 EYLQLRPKTGVGRGLHKSLLTDVALEHHEECDCVCRGSTGG 106

Db 150 RSVKVAKEVYVRKKPK-LKEVQVRLEEHLECACAASSAG 187

RESULT 6

IS1551

platelet-derived growth factor A chain short form precursor - African clawed frog

C:Species: Xenopus laevis (African clawed frog)

C>Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999

C:Accession: IS1551

R:Mercola, M.; Melton, D.A.; Stiles, C.D.

Science 241, 1223-1225, 1988

A:Title: Platelet-derived growth factor A chain is maternally encoded in Xenopus embr

A:Reference number: IS1550; MUID:88321676

A:Accession: IS1551

A>Status: preliminary; translated from GB/EMBL/DDBJ

A:Molecule type: mRNA

A:Residues: 1-200 <MER>

A:Cross-references: GB:M23238; NID:g214650; PIDN:AAA49928.1; PID:g214651

C:Superfamily: platelet-derived growth factor

Query Match 17.6%; Score 105; DB 2; Length 200;

Best Local Similarity 31.4%; Pred. No. 0.0036;

Matches 33; Conservative 14; Mismatches 32; Indels 26; Gaps 8;

QY 11 CTPRNFVSIR-REELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNECQCVPSKVTYKHY 67

Db 101 CKTRTVIIEIPRSQVDPTSANFLINWPPCVVEVKRCTG---CC--NTSSVKCQPSRI---HH 152

QY 68 -----EVLQLRPKTGVGRGLHKSLLTDVALEHHEECDCVCRGST 104

Db 153 RSVKVAKEVYVRKKPK-----LKEVL--VRLEEHLECTCTANSNS 190

```
RESULT 7
S08220
platelet-derived growth factor chain A precursor - African clawed frog
C:Species: Xenopus laevis (African clawed frog)
C:Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 16-Jul-1999
C:Accession: S08220
R:Bejcek, B.E.; Li, D.Y.; Deuel, T.F.
Nucleic Acids Res. 18, 680, 1990
A:Title: Nucleotide sequence of a cDNA clone of Xenopus platelet-derived growth factor A
A:Reference number: S08220; MUID:90175018
A:Accession: S08220
A:Status: translation not shown
A:Molecule type: mRNA
A:Residues: 1-215 <BEJ>
A:Cross-references: EMBL:X17545; NID:g64973; PIDN:CAA35583.1; PID:g64974
C:Superfamily: platelet-derived growth factor
C:Keywords: alternative splicing; growth factor
F:1-22/Domain: signal sequence #status predicted <SIG>
F:23-91/Domain: propeptide #status predicted <PRO>
F:92-215/Product: platelet-derived growth factor chain A #status predicted <WAT>

Query Match 17.6%; Score 105; DB 2; Length 215;
Best Local Similarity 31.4%; Pred. No. 0.0038;
Matches 33; Conservative 14; Mismatches 32; Indels 26; Gaps 8;

QY 11 CTRPNFSVSI-REELKRTDTIF--WPGCLLVKRCGNCACCLHNCQCVPSKVTKKYH 67
DB 101 CKTRTWIYEIQRSDIPTSANFLINPVCVEVKRCTG---CC--NTSSVKQPSRI---HH 152
QY 68 -----EVLQRPKTGVRGLHKSITDVALEHHEECDCVCGST 104
DB 153 RSVKVAKEVVRKKPK-----LKEVL--VRLEEHLECTCTANSNS 190

RESULT 8
I51550
platelet-derived growth factor A chain long form precursor - African clawed frog
C:Species: Xenopus laevis (African clawed frog)
C:Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
C:Accession: I51550
R:Mercola, M.; Melton, D.A.; Stiles, C.D.
Science 241, 1223-1225, 1988
A:Title: Platelet-derived growth factor A chain is maternally encoded in Xenopus embryos
A:Reference number: I51550; MUID:88321676
A:Accession: I51550
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-226 <MER>
A:Cross-references: GB:M23237; NID:g214648; PIDN:AAA49927.1; PID:g214649
C:Superfamily: platelet-derived growth factor

Query Match 17.6%; Score 105; DB 2; Length 226;
Best Local Similarity 31.4%; Pred. No. 0.0039;
Matches 33; Conservative 14; Mismatches 32; Indels 26; Gaps 8;

QY 11 CTRPNFSVSI-REELKRTDTIF--WPGCLLVKRCGNCACCLHNCQCVPSKVTKKYH 67
DB 101 CKTRTWIYEIQRSDIPTSANFLINPVCVEVKRCTG---CC--NTSSVKQPSRI---HH 152
QY 68 -----EVLQRPKTGVRGLHKSITDVALEHHEECDCVCGST 104
DB 153 RSVKVAKEVVRKKPK-----LKEVL--VRLEEHLECTCTANSNS 190

RESULT 9
PFHUG2
platelet-derived growth factor chain B precursor [validated] - human
N:Alternate names: PDGF-B chain; PDGF-II; PDGF-related transforming protein (sis)
C:Species: Homo sapiens (man)
```

```
C:Date: 18-Apr-1984 #sequence_revision 20-Sep-1984 #text_change 08-Dec-2000
C:Accession: A94276; A21024; A93366; A25141; A94271; A93308; A43499; S56115;
R:Josephs, S.F.; Ratner, L.; Clarke, M.F.; Westin, E.H.; Reitz, M.S.; Wong-Staal, F.
Science 225, 636-639, 1984
A:Title: Transforming potential of human c-sis nucleotide sequences encoding platelet
A:Reference number: A94276; MUID:84250225
A:Accession: A94276
A:Molecule type: DNA
A:Residues: 1-241 <JOS1>
A:Cross-references: GB:K01401; NID:g338206; PIDN:AAA60552.1; PID:g338209
R:Chiu, I.M.; Reddy, E.P.; Givol, D.; Robbins, K.C.; Tronick, S.R.; Aaronson, S.A.
Cell 37, 123-129, 1984
A:Title: Nucleotide sequence analysis identifies the human c-sis proto-oncogene as a
A:Reference number: A21024; MUID:84205633
A:Accession: A21024
A:Molecule type: DNA
A:Residues: 17-20, 'RQ', 22-241 <CHI>
A:Cross-references: GB:K01917; NID:g338197
R:Rao, C.D.; Igarashi, H.; Chiu, I.M.; Robbins, K.C.; Aaronson, S.A.
Proc. Natl. Acad. Sci. U.S.A. 83, 2392-2396, 1986
A:Title: Structure and sequence of the human c-sis/platelet-derived growth factor 2 (
A:Reference number: A23532; MUID:86205961
A:Accession: A23532
A:Molecule type: mRNA
A:Residues: 1-241 <RAO1>
A:Cross-references: GB:M12783; GB:M16288; NID:g338210; PIDN:AAA60553.1; PID:g338211
R:Collins, T.; Ginsburg, D.; Boss, J.M.; Orkin, S.H.; Pober, J.S.
Nature 316, 748-750, 1985
A:Title: Cultured human endothelial cells express platelet-derived growth factor B ch
A:Reference number: A93366; MUID:85296313
A:Accession: A93366
A:Molecule type: mRNA
A:Residues: 1-241 <COL>
A:Cross-references: GB:X02811; NID:g35371; PIDN:CAA26579.1; PID:g35372
R:Weich, H.A.; Sebal, W.; Schairer, H.U.; Hoppe, J.
FEBS Lett. 198, 344-348, 1986
A:Title: The human osteosarcoma cell line U-2 OS expresses a 3.8 kilobase mRNA which
A:Reference number: A25141; MUID:86164981
A:Accession: A25141
A:Molecule type: mRNA
A:Residues: 26-241 <WEI>
A:Cross-references: GB:X03702; NID:g35374; PIDN:CAA27333.1; PID:g35375
R:Antoniadou, H.N.; Hunkapiller, M.W.
Science 220, 963-965, 1983
A:Title: Human platelet-derived growth factor (PDGF): amino-terminal amino acid sequ
A:Reference number: A94271; MUID:83197379
A:Accession: A94271
A:Molecule type: protein
A:Residues: 82-100, 'E', 102-104, 'C', 106, 'C', 108-110 <ANT>
R:Waterfield, M.D.; Scrase, G.T.; Whittle, N.; Stroobant, P.; Johnsson, A.; Wasteson,
Nature 304, 35-39, 1983
A:Title: Platelet-derived growth factor is structurally related to the putative trans
A:Reference number: A93308; MUID:83244981
A:Accession: A93308
A:Molecule type: protein
A:Residues: 82-112 <WAT>
R:Josephs, S.F.; Guo, C.; Ratner, L.; Wong-Staal, F.
Science 223, 487-491, 1984
A:Title: Human proto-oncogene nucleotide sequences corresponding to the transforming
A:Reference number: A43499; MUID:84097555
A:Accession: A43499
A:Status: not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 'O', 22-241 <JOS2>
R:Lu, K.V.; Rohde, M.F.; Thomson, A.R.; Kenney, W.C.; Lu, H.S.
Biochem. J. 309, 411-417, 1995
A:Title: Mistranslation of a TGA termination codon as tryptophan in recombinant plate
A:Reference number: S56115; MUID:95351967
A:Accession: S56115
A:Status: preliminary
A:Molecule type: protein
A:Residues: 82-93 <JWS>
R:Rao, C.D.; Pech, M.; Robbins, K.C.; Aaronson, S.A.
```

Mol. Cell. Biol. 8, 284-292, 1988
A:Title: The 5' untranslated sequence of the c-sis/platelet-derived growth factor 2 trans
A:Reference number: I57635; MUID:88094398
A:Accession: I57635
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-20 <RAO2>
A:Cross-references: GB:M19719; NID:g189727; PIDN:AAA60349.1; PID:g553608
R:Ratner, L.; Josephs, S.F.; Jarrett, R.; Reitz, M.S.
Nucleic Acids Res. 13, 5007-5018, 1985
A:Title: Nucleotide sequence of transforming human c-sis cDNA clones with homology to pl
A:Reference number: I37266; MUID:85269623
A:Accession: I37266
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-241 <RAT>
A:Cross-references: EMBL:X02744; NID:g30246; PIDN:CAA26524.1; PID:g30247
R:Johnson, A.; Heldin, C.H.; Wasteson, A.; Westermark, B.; Deuel, T.F.; Huang, J.S.; Se
EMBO J. 3, 921-928, 1984
A:Title: The c-sis gene encodes a precursor of the B chain of platelet-derived growth fa
A:Reference number: A55030; MUID:84236121
A:Accession: A55030
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 'SLSL', 17-20, 'RQ', 22-241 <JOH>
A:Cross-references: GB:X00556; GB:X00559; GB:X00560; GB:X00561; GB:X00562
R:Dirks, R.P.H.; Onnekink, C.; Jansen, H.J.; de Jong, A.; Bloemers, H.P.J.
Nucleic Acids Res. 23, 2815-2822, 1995
A:Title: A novel human c-sis mRNA species is transcribed from a promoter in c-sis intron
A:Reference number: S59382; MUID:95388493
A:Accession: S59383
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 'MFIMGL', 22-200 <DIR>
A:Cross-references: EMBL:X83705; NID:g951023; PIDN:CAA58679.1; PID:g951025
R:Cook, A.L.; Kirwin, P.M.; Craig, S.; Bawden, L.J.; Green, D.R.; Price, M.J.; Richards
Biochem. J. 281, 57-65, 1992
A:Title: Purification and analysis of proteinase-resistant mutants of recombinant plate
A:Reference number: I38108; MUID:92117992
A:Accession: I38108
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 'M', 82-241 <COO>
A:Cross-references: EMBL:X63966; NID:g311378; PIDN:CAA43383.1; PID:g35377
A:Note: mutagenized recombinant sequence
C:Comment: Platelet-derived growth factor, a potent mitogen for cells of mesenchymal ori
C:Genetics:
A:Gene: GDB:PDGFB
A:Cross-references: GDB:120709; OMIM:190040
A:Map position: 22q12.3-22q13.1
A:Introns: 57/3; 94/1; 192/3; 241/1
C:Complex: homodimer; heterodimer (see PIR:PFHUG1)
C:Superfamily: platelet-derived growth factor
C:Keywords: growth factor; mitogen
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-81/Domain: amino-terminal propeptide #status predicted <PRO>
F:82-190/Product: platelet-derived growth factor chain B #status experimental <MAT>
F:159-163/Region: receptor binding #status predicted
F:191-241/Domain: carboxyl-terminal propeptide #status predicted <CTP>
F:97-141, 130-178, 134-180/disulfide bonds: #status experimental
F:124/disulfide bonds: interchain (to 133 in homodimeric form) #status experimental
F:124/disulfide bonds: interchain (to chain A-132 in heterodimeric form) #status predict
F:133/disulfide bonds: interchain (to 124 in homodimeric form) #status experimental
F:133/disulfide bonds: interchain (to chain A-124 in heterodimeric form) #status predict

Query Match 17.6%; Score 105; DB 1; Length 241;
Best Local Similarity 33.3%; Pred. No. 0.0042;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

QY 2 LTEEVRLSYCTPRN--FSVSIREELKRTDIF--WPGCLLVKRCGNCACCLHNCQC 57
DB 88 IAEPMIAECKTTEVFEIS--RRLLDRTNANFLWPPCPEVQRCSG---CC---NNRNVC 141

QY 58 VPSKVTKKYHEVLQLRP----KTGV----RGLHKSLLTDVALEHHECDC 98
DB 142 RPTQV-----QLRPVQVRKIEIVRKRP-----VFKKAT-VTLEDHLACKC 180

RESULT 10

TVCTSS

N:platelet-derived growth factor chain B precursor - cat
N:Alternate names: PDGF-related transforming protein
C:Species: Fells silvestris catus (domestic cat)

C:Date: 30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 31-Mar-1996
C:Accession: A26402

R:Van den Ouweland, A.M.W.; Van Groningen, J.J.M.; Schalken, J.A.; Van Neck, H.W.; B
Nucleic Acids Res. 15, 959-970, 1987

A:Title: Genetic organization of the c-sis transcription unit.

A:Reference number: A26402; MUID:87146463

A:Accession: A26402

A:Molecule type: mRNA

A:Residues: 1-245 <VAN>

C:Genetics:

A:Gene: sis

C:Superfamily: platelet-derived growth factor

C:Keywords: glycoprotein; growth factor; platelet; proto-oncogene; transforming prot

F:1-20/Domain: signal sequence #status predicted <SIG>

F:21-81/Domain: propeptide #status predicted <PRO>

F:82-194/Product: platelet-derived growth factor chain B #status predicted <MAT>

F:163-167/Region: receptor binding #status predicted

F:63/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 17.6%; Score 105; DB 1; Length 245;

Best Local Similarity 33.0%; Pred. No. 0.0042;

Matches 35; Conservative 13; Mismatches 36; Indels 22; Gaps 8;

QY 2 LTEEVRLSYCTPRN--FSVSIREELKRTDIF--WPGCLLVKRCGNCACCLHNCQC 57

DB 92 VASPMIAECKTTEVFEIS--RRLLDRTNANFLWPPCPEVQRCSG---CC---NNRNVC 145

QY 58 VPSKVTKKY-----HEVLQLRPKTGVGRGLHKSLLTDVALEHHECDC 98

DB 146 RPTQVQLRLVQVRKIEIVRKRP-----VFKKAT-VTLEDHLACKC 184

RESULT 11

A41551

N:vascular endothelial growth factor 206 precursor - human

N:Alternate names: vascular permeability factor

C:Species: Homo sapiens (man)

C:Date: 28-Aug-1992 #sequence_revision 28-Aug-1992 #text_change 05-Nov-1999

C:Accession: A41551; C41551; A40454; B40454; A40079; A40080; JQ1463;

R:Houck, K.A.; Ferrara, N.; Winer, J.; Cachianes, G.; Li, B.; Leung, D.W.

Mol. Endocrinol. 5, 1806-1814, 1991

A:Title: The vascular endothelial growth factor family: identification of a fourth mo

A:Reference number: A41551; MUID:92168017

A:Accession: A41551

A:Molecule type: mRNA

A:Residues: 1-232 <HOU1>

A:Cross-references: GB:S85192; NID:g246155; PID:g246156

A:Accession: C41551

A:Status: nucleic acid sequence not shown

A:Molecule type: mRNA

A:Residues: 1-140, 'N', 183-232 <HOU2>

A:Accession: B41551

A:Status: nucleic acid sequence not shown; not compared with conceptual translation

A:Molecule type: mRNA

A:Residues: 1-141, 227-232 <HOU>

R:Tischer, E.; Mitchell, R.; Hartman, T.; Silva, M.; Gospodarowicz, D.; Fiddes, J.C.

J. Biol. Chem. 266, 11947-11954, 1991

A:Title: The human gene for vascular endothelial growth factor. Multiple protein form

A:Reference number: A40454; MUID:91268072

A:Accession: A40454

A:Molecule type: DNA
A:Residues: 1-165,183-232 <Y11>
A:Cross-references: GB:M63971; GB:M63972; GB:M63973; GB:M63974; GB:M63975; GB:M63976; GB:M63977; GB:M63978
A:Accession: B40454
A:Molecule type: DNA
A:Residues: 1-140, 'N', 183-232 <Y12>
A:Cross-references: GB:M63971; GB:M63972; GB:M63973; GB:M63974; GB:M63975; GB:M63977; GB:M63978
A:Accession: C40454
A:Molecule type: DNA
A:Residues: 1-141,227-232 <Y13>
A:Cross-references: GB:M63971; GB:M63972; GB:M63973; GB:M63974; GB:M63975; GB:M63978
R:Keck, P.J.; Hauser, S.D.; Krivi, G.; Sanzo, K.; Warren, T.; Feder, J.; Connolly, D.T.
Science 246, 1309-1312, 1989
A:Title: Vascular permeability factor, an endothelial cell mitogen related to PDGF.
A:Reference number: A40079; MUID:90069609
A:Accession: A40079
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-165,183-232 <YEC>
A:Cross-references: GB:M27281; NID:g340300; PIDN:AAA36907.1; PID:g340301
R:Leung, D.W.; Cachianes, G.; Kuang, W.J.; Goeddel, D.V.; Ferrara, N.
Science 246, 1306-1309, 1989
A:Title: Vascular endothelial growth factor is a secreted angiogenic mitogen.
A:Reference number: A40080; MUID:90069608
A:Accession: A40080
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-140, 'N', 183-232 <YED>
A:Cross-references: GB:M32977; NID:g181970; PIDN:AAA35789.1; PID:g181971
R:Weindel, K.; Marme, D.; Weich, H.A.
Biochem. Biophys. Res. Commun. 183, 1167-1174, 1992
A:Title: AIDS-associated Kaposi's sarcoma cells in culture express vascular endothelial
A:Reference number: JQ1463; MUID:92231879
A:Accession: JQ1463
A:Molecule type: mRNA
A:Residues: 1-140, 'N', 183-232 <YED>
A:Cross-references: EMBL:X62568; NID:g37658; PIDN:CAA44447.1; PID:g37659
A:Experimental source: AIDS-Kaposi's sarcoma cell
A:Accession: JQ1464
A:Molecule type: mRNA
A:Residues: 1-140, 'N', 227-232 <YED>
A:Experimental source: AIDS-Kaposi's sarcoma cell
R:Connolly, D.T.; Olander, J.V.; Heuvelman, D.; Nelson, R.; Monsell, R.; Siegel, N.; Hay
J. Biol. Chem. 264, 20017-20024, 1989
A:Title: Human vascular permeability factor. Isolation from U937 cells.
A:Reference number: A34492; MUID:90062112
A:Accession: A34492
A:Molecule type: protein
A:Residues: 27-36,43-49, 'R',72-76, 'Q',78-81,59-71 <CON>
A:Comment: The most common of several alternatively spliced forms is VEGF 165.
C:Genetics:
A:Gene: GDB:VEGF
A:Cross-references: GDB:132244; OMIM:192240
A:Map position: 6p21-6p12
C:Function:
A:Description: promotes fluid and protein leakage from blood vessels
A:Keywords: alternative splicing; angiogenesis; dimer; disulfide bond; extracellular pro
F:1-232/Product: vascular endothelial growth factor 206 precursor #status predicted <V20
F:1-165,183-232/Product: vascular endothelial growth factor 189 precursor #status predic
F:1-141,227-232/Product: vascular endothelial growth factor 121 precursor #status predic
F:1-76/Domain: signal sequence #status predicted <SIG>
F:101/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 17.5%; Score 104.5; DB 2; Length 232;
Best Local Similarity 27.0%; Pred. No. 0.0045;
Matches 24; Conservative 21; Mismatches 33; Indels 11; Gaps 4;
QY 11 CTPRNFVSIRBEL-KRTDTIFWPGCLLVKRCGNCACCLHNCNECQVPSKTKYHEV 69
Db 52 CHPIETLVDIFQYDFEYIFKPCVPLMRGG--CC--NDEGLECVPTESNITMQI 106
QY 70 LQLRPKTGVRGLHLSLTDALEHHEECDC 98

Db 107 MRIRPHQG-----QHIGEMSFLOHNKCEC 130
RESULT 12
B28964
platelet-derived growth factor chain A precursor splice form 2 - human
C:Species: Homo sapiens (man)
C:Date: 30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 16-Jul-1999
C:Accession: B28964; B42002; B28122
R:Bonthron, D.T.; Morton, C.C.; Orkin, S.H.; Collins, T.
Proc. Natl. Acad. Sci. U.S.A. 85, 1492-1496, 1988
A:Title: Platelet-derived growth factor A chain: gene structure, chromosomal location
A:Reference number: A28964; MUID:88144463
A:Accession: B28964
A:Molecule type: DNA
A:Residues: 1-196 <BON>
A:Cross-references: GB:M21571; GB:J03638; GB:M19984; GB:M19985; GB:M19986; GB:M19987;
R:Bonthron, D.; Collins, T.; Grzeschik, K.H.; van Roy, N.; Speleman, F.
Genomics 13, 257-263, 1992
A:Title: Platelet-derived growth factor A chain: confirmation of localization of PDGF
A:Reference number: A42002; MUID:92307656
A:Accession: B42002
A:Status: preliminary; not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 152-196 <BO2>
R:Rorsman, F.; Bywater, M.; Knott, T.J.; Scott, J.; Betsholtz, C.
Mol. Cell. Biol. 8, 571-577, 1988
A:Title: Structural characterization of the human platelet-derived growth factor A-ch
A:Reference number: A28122; MUID:88174698
A:Accession: B28122
A:Molecule type: mRNA
A:Residues: 1-63, 'TRD', 67-196 <ROR>
A:Cross-references: GB:M20488
A:Note: the authors translated the codon ACA for residue 64 as AAG, CGT for residue 6
C:Comment: Exon 6 is spliced out of this variant splice form. For the major splice fo
C:Genetics:
A:Gene: GDB:PDGFA
A:Cross-references: GDB:120266; OMIM:173430
A:Map position: 7p22-7p22
C:Superfamily: platelet-derived growth factor
C:Keywords: alternative splicing; glycoprotein; growth factor; mitogen; platelet

Query Match 17.4%; Score 104; DB 2; Length 196;
Best Local Similarity 34.0%; Pred. No. 0.0044;
Matches 32; Conservative 12; Mismatches 34; Indels 16; Gaps 6;
QY 11 CTPRNFVSIRBELKRTDTIF--WPGCLLVKRCGNCACCLHNCNECQVPSKV---TK 64
Db 96 CKTRTVIYEIPRSQVDPTSANFLWPPCPEVKRCTG---CC--NTSSVKQPSRVHRSV 150
QY 65 KYHEVLQLRPKTGVRGLHLSLTDALEHHEECDC 98
Db 151 KVAREYVRRKPKLKEV-----QVRLEHLEAC 179
RESULT 13
S25096
platelet-derived growth factor chain A precursor - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C:Date: 07-Apr-1994 #sequence_revision 07-Apr-1994 #text_change 16-Jul-1999
C:Accession: S25096; S33764
R:Herren, B.; Weyer, K.A.; Rouge, M.; Loetscher, P.; Pech, M.
submitted to the EMBL Data Library, July 1992
A:Description: Cross-species conservation in sequence and function of PDGF ligands an
A:Reference number: S25096
A:Accession: S25096
A:Molecule type: mRNA
A:Residues: 1-197 <HER1>
A:Cross-references: EMBL:Z14120; NID:g56865; PIDN:CAA78490.1; PID:g56866
R:Herren, B.; Weyer, K.A.; Rouge, M.; Loetscher, P.; Pech, M.
Biochim. Biophys. Acta 1173, 294-302, 1993

A;Title: Structural characterization of the human platelet-derived growth factor A-C

A;Reference number: A28122; MUID:98174698

A;Accession: A28122

A:Molecule type: mRNA

A;Residues: 1-63,'TRD','67-211 <ROR>

A;Cross-references: GB:M20488

A;Note: The authors translated the codon ACA for residue 64 as Arg, CQT for residue I

C;Comment: Platelet-derived growth factor, a potent mitogen for cells of mesenchymal

C;Comment: A carboxyl-terminal propeptide may be removed from the precursor by proteol

C;Genetics:

A;Gene: GDB:PDGFA

A;Cross-references: GDB:I120266; OMIM:173430

A;Map position: 7p22-7p22

A;Introns: 21/3; 54/1; 89/1; 151/3; 194/1

C;Complex: homodimer; heterodimer (see PIR:PFHUG2)

C;Superfamily: platelet-derived growth factor

C;Keywords: alternative splicing; glycoprotein; growth factor; mitogen; platelet

F;I-20/Domain: signal sequence #status predicted <SIG>

F;F;21-86/Domain: propeptide #status predicted <PRO>

F;F;87-211/Product: platelet-derived growth factor chain A #status predicted <MAT>

F;F;158-162/Region: receptor binding #status predicted

F;F;96-140,129-177,133-179/Disulfide bonds: #status predicted

F;F;123/disulfide bonds: interchain (to chain B-133 in heterodimeric form) #status pred

F;F;132/disulfide bonds: interchain (to 132 in homodimeric form) #status predicted

F;F;132/disulfide bonds: interchain (to chain B-124 in heterodimeric form) #status pred

F;F;132/disulfide bonds: interchain (to 123 in homodimeric form) #status predicted

F;I34/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 17.4%; Score 104; DB 1; Length 211;
Best Local Similarity 34.0%; Pred. No. 0.0047;
Matches 32; Conservative 12; Mismatches 34; Indels 16; Gaps 6;

QY 11 CTPRNFSVSI-REELKTDITF--WPGCLLVKRCGGNCACCLHNCNECOCVPISKV---TK 64
| | : : : | | | : | | | : | | : : | | : |
Db 96 CKRTVIYEIPRSQVDPTSANFLWPPCVEVKRCTG---CC--NTSSVKQCPSRVVHRSV 150
| | : : : | | | : | | | : | | : : | | : |

QY 65 KYHEVLQLRPKTGVGRGLHKSLTDVALEHHCECD 98
| | : : : | | : : | | | : | | | : | |

Db 151 KVARVEYVRKKPKLKEV-----QVRLEEHLAC 179
| | : : : | | : : | | | : | | | : | |

RESULT 15

TMVSS

PDGF-related transforming protein (sis) - simian sarcoma virus

N;Alternate names: p28-sis

C;Species: simian sarcoma virus

C;Date: 23-Jul-1983 #sequence_revision 20-Sep-1984 #text_change 31-Oct-1997

C;Accession: A01381

R;Devere, S.G.; Reddy, E.P.; Law, J.D.; Robbins, K.C.; Aaronson, S.A.
Proc. Natl. Acad. Sci. U.S.A. 80, 731-735, 1983

A;Title: Nucleotide sequence of the simian sarcoma virus genome: demonstration that i

A;Reference number: A03982; MUID:83144004

A;Accession: A01381

A:Molecule type: genomic RNA

A;Residues: 1-226 <DEV>

C;Genetics:

A;Gene: sis

C;Superfamily: platelet-derived growth factor

C;Keywords: growth factor; transforming protein

F;F;6-226/Domain: platelet-derived growth factor chain B similarity <PDG>

Query Match 17.4%; Score 104; DB 1; Length 226;
Best Local Similarity 33.3%; Pred. No. 0.005;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

QY 2 LTEEVRLYSCTPRN--FSVSIREELKRDTITF--WPGCILLVKRCGGNCACCLHNCNECQC 57
: | | : | | : | | : | | : | | : | | : | | : | |

Db 73 VAEPAMTAECKTRTEVPEIS-RLIDRTNANFLWPPCVVEQRCSG---CC---NNRNVCQ 126
: | | : | | : | | : | | : | | : | | : | | : | |

QY 58 VPSKPATKKYHEVLQRP----KTGV---RGLHKSLTDVALEHHCECD 98
: | | : | | : | | : | | : | | : | | : | | : | |

Db 127 RPTQV-----QLRPVQVRKIEIVRKKPIFKKAT-VTLEDHLACKC 165

Search completed: May 24, 2002, 09:59:01
Job time: 145 sec

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:58:41 ; Search time 11.84 Seconds
(without alignments)
346.645 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345

Perfect score: 597

Sequence: 1 LITEVRLYSCIPRNFVSI.....DVALEHHECDVCRGSTGG 106

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 105224 seqs, 38719550 residues

Total number of hits satisfying chosen parameters: 105224

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	117.5	19.7	326	1	VEGD_RAT
2	115.5	19.3	358	1	VEGD_MOUSE
3	114.5	19.2	148	1	VEGH_ORFN7
4	111.5	18.7	354	1	VEGD_HUMAN
5	108.5	18.2	164	1	VEGA_CAVPO
6	108	18.1	213	1	PDGA_RABIT
7	105	17.6	207	1	VEGB_HUMAN
8	105	17.6	226	1	PDGA_XENLA
9	105	17.6	241	1	PDGB_HUMAN
10	105	17.6	245	1	PDGB_FELCA
11	104.5	17.5	232	1	VEGA_HUMAN
12	104	17.4	204	1	PDGA_RAT
13	104	17.4	211	1	PDGA_HUMAN
14	104	17.4	211	1	PDGA_MOUSE
15	104	17.4	226	1	TSIS_SMSAV
16	102.5	17.2	133	1	VEGH_ORFN2
17	102.5	17.2	190	1	VEGA_PIG
18	102.5	17.2	214	1	VEGA_CANFA
19	102	17.1	207	1	VEGB_BOVIN
20	101.5	17.0	146	1	VEGA_SHEEP
21	101.5	17.0	190	1	VEGA_BOVIN
22	100.5	16.8	419	1	VEGC_HUMAN
23	99.5	16.7	415	1	VEGC_MOUSE
24	97.5	16.3	190	1	VEGA_HORSE
25	97	16.2	207	1	VEGB_MOUSE
26	96.5	16.2	214	1	VEGA_RAT
27	95.5	16.0	190	1	VEGA_MESAU
28	95.5	16.0	214	1	VEGA_MOUSE
29	94	15.7	135	1	VEGB_RAT
30	94	15.7	225	1	PDGB_RAT
31	94	15.7	241	1	PDGB_MOUSE
32	88.5	14.8	216	1	VEGA_CHICK
33	87	14.6	241	1	PDGB_SHEEP

34	84	14.1	158	1	PLGF_MOUSE	P49764	mus musculus
35	83.5	14.0	5179	1	MUC2_HUMAN	Q02817	homo sapien
36	80	13.4	158	1	PGLF_RAT	Q63434	rattus norv
37	80	13.4	221	1	PLGF_HUMAN	P49763	homo sapien
38	77.5	13.0	3672	1	LML2_CABEL	Q21313	caenorhabdi
39	73	12.2	60	1	MTA_CHIHA	Q13258	chionodraco
40	73	12.2	60	1	MTA_NOTCO	Q73914	notothenia
41	73	12.2	60	1	MTA_PAGBE	O93609	pagothenia
42	73	12.2	60	1	MTB_CHAAC	P52724	chaenoceph
43	73	12.2	60	1	MTB_CHIHA	O13259	chionodraco
44	73	12.2	60	1	MTB_PAGBE	O92145	pagothenia
45	73	12.2	60	1	MT_PAGMA	Q91b50	pagrus majo

ALIGNMENTS

RESULT 1

VEGD_RAT

ID VEGD_RAT STANDARD; PRT: 326 AA.

AC O35251;

DT 01-MAR-2002 (Rel. 41, Created)

DT 01-MAR-2002 (Rel. 41, Last sequence update)

DT 01-MAR-2002 (Rel. 41, Last annotation update)

DE Vascular endothelial growth factor D precursor (VEGF-D) (c-fos induced growth factor) (FIGF).

DE FIGF OR VEGFD.

GN Rattus norvegicus (Rat).

OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Rattus.

OC NCBI_TaxID=10116;

OX [1]

RN SEQUENCE FROM N.A.

RP STRAIN=Sprague-Dawley;

RA	Yamada Y., Hirata Y., Nezu J., Shimane M.;						
RL	Submitted (JUL-1997) to the EMBL/GenBank/DBAJ databases.						
CC	-!- FUNCTION: Growth factor active in angiogenesis, lymphangiogenesis and migration and also has effects on the permeability of blood vessels. May function in the formation of the venous and lymphatic vascular systems during embryogenesis, and also in the maintenance of differentiated lymphatic endothelium in adults. Binds and activates VEGFR-3 (Flt4) receptor (By similarity).						
CC	-!- SUBUNIT: Homodimer; non-covalent and antiparallel (By similarity).						
CC	-!- SUBCELLULAR LOCATION: Secreted (By similarity).						
CC	-!- PTM: Undergoes a complex proteolytic maturation which generates a variety of processed secreted forms with increased activity toward VEGFR-3 and VEGFR-2. VEGF-D first form an antiparallel homodimer linked by disulfide bonds before secretion. The fully processed VEGF-D is composed mostly of two VEGF homology domains (VHDS) bound by non-covalent interactions (By similarity).						
CC	-!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.						
CC	-----						
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).						
CC	-----						
CC	EMBL; AF014827; AAB66557.1; --						
DR	HSSP; P15692; IVPV.						
DR	InterPro; IPR000072; PDGF.						
DR	Pfam; PF00341; PDGF; 1.						
DR	ProDom; PD001629; PDGF; 1.						
DR	SMART; SM00141; PDGF; 1.						
DR	PROSITE; PS00249; PDGF_1; 1.						
DR	PROSITE; PS0278; PDGF_2; 1.						
KW	Mitogen; Growth factor; Glycoprotein; Signal; Repeat;						
KW	Cleavage on pair of basic residues; Multigene family.						
FT	SIGNAL 1 21 POTENTIAL.						
FT	PROPEP 22 93 POTENTIAL.						

```

FT CHAIN 94 210 VASCULAR ENDOTHELIAL GROWTH FACTOR D.
FT PROPEP 211 326 POTENTIAL.
FT DOMAIN 227 317 4 X 16 AA REPEATS OF C-X(10)-C-X-C-
FT X(1,3)-C.
FT REPEAT 227 242 1 (APPROXIMATE).
FT REPEAT 283 278 2.
FT REPEAT 282 317 3.
FT REPEAT 306 317 4 (INCOMPLETE).
FT DISULFID 116 158 INTRACHAIN (BY SIMILARITY).
FT DISULFID 147 194 INTRACHAIN (BY SIMILARITY).
FT DISULFID 151 196 INTRACHAIN (BY SIMILARITY).
FT DISULFID 141 141 INTERCHAIN (BY SIMILARITY).
FT DISULFID 150 150 INTERCHAIN (BY SIMILARITY).
FT CARBOHYD 160 160 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 292 292 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 326 AA; 37112 MW; 1261AFA373596C00 CRC64;

Query Match 19.7%; Score 117.5; DB 1; Length 326;
Best Local Similarity 33.0%; Pred No. 2.8e-05;
Matches 35; Conservative 15; Mismatches 41; Indels 15; Gaps 6;

QY 1 LITEEVRLYSCPRNFVSIREEL-KRDTIFWPGLLVKRCGGNACCLHNCQCV- 58
DB 106 VIDEWQRTQCSPRETCVEVASELGKTTNTFFKPCVNVFCGG---CC--NEESVMCMN 160
QY 59 --PSKVTKKYHEVLQRPKTGVRLGLKSLTDVALEHHECDVCVRG 102
DB 161 TSTYSIKOLFESV--PLTSV-----PELVVPVKIANHTGCKCLPTG 200

RESULT 2
VEGD_MOUSE
ID VEGD_MOUSE STANDARD; PRT; 358 AA.
AC P97946;
DT 01-MAR-2002 (Rel. 41, Created)
DT 01-MAR-2002 (Rel. 41, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Vascular endothelial growth factor D precursor (VEGF-D) (c-fos induced
DE growth factor) (FIGF).
GN FIGF OR VEGFD.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Fibroblast;
RX MEDLINE=97030254; PubMed=8876195;
RA Orlandini M., Marconini L., Ferruzzi R., Oliviero S.;
RT "Identification of a c-fos-induced gene that is related to the
RT platelet-derived growth factor/vascular endothelial growth factor
RT family.";
RT Proc. Natl. Acad. Sci. U.S.A. 93:11675-11680(1996).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Lung;
RX MEDLINE=97349118; PubMed=9205122;
RA Yamada Y., Nezu J.-I., Shimane M., Hirata Y.;
RT "Molecular cloning of a novel vascular endothelial growth factor,
RT VEGF-D.";
RL Genomics 42:483-488(1997).
RN [3]
RP DEVELOPMENTAL STAGE.
RX MEDLINE=98288130; PubMed=9622638;
RA Avantaggiato V., Orlandini M., Acampora D., Oliviero S., Simeone A.;
RT "Embryonic expression pattern of the murine figf gene, a growth factor
RT belonging to platelet-derived growth factor/vascular endothelial
RT growth factor family.";
RL Mech. Dev. 73:221-224(1998).
RN [4]
RP RECEPTOR SPECIFICITY.

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RX MEDLINE=21276411; PubMed=11279005;
RA Baldwin M.E., Catimel B., Nice E.C., Roufail S., Hall N.E.;
RA Stevens K.L., Karkkainen M.J., Alitalo K., Stacker S.A., Achen M.G.;
RT "The specificity of receptor binding by vascular endothelial growth
RT factor-d is different in mouse and man.";
RL J. Biol. Chem. 276:19166-19171(2001).
CC -!- FUNCTION: Growth factor active in angiogenesis, lymphangiogenesis
CC and endothelial cell growth, stimulating their proliferation and
CC migration and also has effects on the permeability of blood
CC vessels. May function in the formation of the venous and lymphatic
CC vascular systems during embryogenesis, and also in the maintenance
CC of differentiated lymphatic endothelium in adults. Binds and
CC activates VEGFR-3 (Flt4) receptor.
CC -!- SUBUNIT: Homodimer; non-covalent and antiparallel.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Highly expressed in fetal and adult lung.
CC -!- DEVELOPMENTAL STAGE: Expressed in a dynamic pattern in several
CC body structures and organs of the embryo such as limb buds,
CC acoustic ganglion, teeth, heart, anterior pituitary as well as
CC lung and kidney mesenchyme, liver, derma, and periosteum of the
CC vertebral column.
CC -!- INDUCTION: By the transcription factor c-fos.
CC -!- PTM: Undergoes a complex proteolytic maturation which generates a
CC variety of processed secreted forms with increased activity toward
CC VEGFR-3 and VEGFR-2. VEGF-D first form an antiparallel homodimer
CC linked by disulfide bonds before secretion. The fully processed
CC VEGF-D is composed mostly of two VEGF homology domains (VHDs)
CC bound by non-covalent interactions (by similarity).
CC -!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
CC -----
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CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; X99572; CAA67892.1; -
DR EMBL; D89628; BAAL4002.1; -
DR HSSP; P15892; 1VPP.
DR MGD; MGI:108037; Figf.
DR InterPro; IPR000072; PDGF.
DR Pfam; PF00341; PDGF; 1.
DR ProDom; PD001629; PDGF; 1.
DR SMART; SM00141; PDGF; 1.
DR PROSITE; PS00249; PDGF_1; 1.
DR PROSITE; PS50278; PDGF_2; 1.
DR Mitogen; Growth factor; Glycoprotein; Signal; Repeat;
KW Cleavage on pair of basic residues; Multigene family.
FT SIGNAL 1 21 POTENTIAL.
FT PROPEP 22 93 POTENTIAL.
FT CHAIN 94 210 VASCULAR ENDOTHELIAL GROWTH FACTOR D.
FT PROPEP 211 358 POTENTIAL.
FT DOMAIN 227 323 4 X 16 AA REPEATS OF C-X(10)-C-X-C-
FT X(1,3)-C.
FT REPEAT 227 242 1 (APPROXIMATE).
FT REPEAT 263 278 2.
FT REPEAT 282 298 3.
FT REPEAT 306 323 4.
FT DISULFID 116 158 INTRACHAIN (BY SIMILARITY).
FT DISULFID 147 194 INTRACHAIN (BY SIMILARITY).
FT DISULFID 151 196 INTRACHAIN (BY SIMILARITY).
FT DISULFID 141 141 INTERCHAIN (BY SIMILARITY).
FT DISULFID 150 150 INTERCHAIN (BY SIMILARITY).
FT CARBOHYD 160 160 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 292 292 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 358 AA; 40908 MW; 6636B17FBF07037C CRC64;

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Query Match 19.3%; Score 115.5; DB 1; Length 358;
Best Local Similarity 33.0%; Pred. No. 4.9e-05;

Matches	35;	Conservative	15;	Mismatches	41;	Indels	15;	Gaps	6;	
QY	1	LLTEEVRLY	SCTPRNFVS	IREEL-KRTD	TFWPGCLLV	KRCGNCACCL	HLNCNEC	OCV- 58		
Db	106	VIDEWMQ	TCSPRET	CVASEL	GLKGTNT	FFKPPCVN	FRCGG---CC	---NEBGVMCMN 160		
QY	59	--PSKVT	KKYHEV	LQRP	KTGVRGL	HLKSLTD	VALEHHEC	DCVCRG 102		
Db	161	TSYISY	SKQF	FEISV--PLTSV	-----	PELV	VPVKIANHTGCK	CLPTG 200		
RESULT	3									
VEGH_ORFN7										
ID	VEGH_ORFN7	STANDARD;		PRT;	148	AA.				
AC	P52585;									
DT	01-OCT-1996	(Rel. 34, Created)								
DT	01-OCT-1996	(Rel. 34, Last sequence update)								
DT	16-OCT-2001	(Rel. 40, Last annotation update)								
DE	Vascular endothelial growth factor homolog precursor.									
GN	AKR.									
OS	Orf virus (strain NZ7) (OV NZ-7).									
OC	Viruses; dsDNA viruses, no RNA stage; Poxviridae; Chordopoxvirinae;									
OC	Parapoxvirus.									
OX	NCBI_TaxID=73495;									
RN	[1]									
SEQUENCE	FROM N.A.									
RX	MEDLINE=94076465; PubMed=8254780;									
RT	Lyttle D.J., Fraser K.M., Fleming S.B., Mercer A.A., Robinson A.J.;									
RT	"Homologs of vascular endothelial growth factor are encoded by the									
RT	poxvirus orf virus.";									
RT	J. Virol. 68:84-92(1994).									
CC	-1- FUNCTION: INDUCES ENDOTHELIAL PROLIFERATION.									
CC	-1- SUBUNIT: HOMODIMER; DISULFIDE-LINKED (BY SIMILARITY).									
CC	-1- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.									
CC	-----									
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration									
CC	between the Swiss Institute of Bioinformatics and the EMBL outstation									
CC	the European Bioinformatics Institute. There are no restrictions on its									
CC	use by non-profit institutions as long as its content is in no way									
CC	modified and this statement is not removed. Usage by and for commercial									
CC	entities requires a license agreement (See http://www.isb-sib.ch/announcement/									
CC	or send an email to license@isb-sib.ch).									
CC	-----									
CC	EMBL; S67522; AAB29223.1; -									
CC	HSSP; P15692; 2VPF.									
DR	InterPro; IPR000072; PDGF.									
DR	Pfam; PF00341; PDGF_1.									
DR	ProDom; PD001629; PDGF; 1.									
DR	SMART; SM00141; PDGF; 1.									
DR	PROSITE; PS00249; PDGF_1; FALSE_NEG.									
DR	PROSITE; PS50278; PDGF_2; 1.									
KW	Mitogen; Growth factor; Glycoprotein; Signal.									
FT	SIGNAL	1	25	POTENTIAL.						
FT	CHAIN	26	148	VASCULAR ENDOTHELIAL GROWTH FACTOR						
FT				HOMOLOG.						
FT	DISULFID	46	88	BY SIMILARITY.						
FT	DISULFID	77	130	BY SIMILARITY.						
FT	DISULFID	81	132	BY SIMILARITY.						
FT	DISULFID	71	71	INTERCHAIN (BY SIMILARITY).						
FT	DISULFID	80	80	INTERCHAIN (BY SIMILARITY).						
FT	CARBOHYD	95	95	N-LINKED (GLCNAC. .) (POTENTIAL).						
FT	SEQUENCE	148	AA;	16078	MM;	F0E13BA104	CC73F8	CRC64;		
Query Match				19.2%;	Score	114.5;	DB	1;	Length	148;
Best Local Similarity				30.2%;	Pred. No.	2.7e-05;				
Matches	29;	Conservative	19;	Mismatches	43;	Indels	5;	Gaps	3;	
QY	11	CTPRNF	SVSIREEL-KRTD	TFWPGCLLV	KRCGNCACCL	HLNCNEC	OCVPSKV	TKKYHEV 69		
Db	46	CKPRD	TVVYIGE	EPYESTIN	LOINPR	CVNFRK	CSG---CC	NGDGOICITAFVPRNTVTVSV 10		

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QY 4 EEWKLYS-----CTPRNFVSYSIREEL-KRTDTITFWGCLLVRRKGGNCACLLRNCEQ 56
    |||:      |||:      |||:      |||:      |||:      |||:      |||:      |||:
Db 12 EEWKFMVVKRSYCRPIEMLVDFIQEYPDEIEYIFKPSVPLMRGG---CC--NDESLE 66

QY 57 CVPSKVTKKYHEVLQLRPKTGVCRGLHKSLLTDVALEHHECDC 98
    |||:      :|||:      |||:      |||:      |||:      |||:      |||:      |||:
Db 67 CVPTREENITMQIMRIAPHOG-----QHIGEMSFLOHKKCEC 103

RESULT 6
PDGA_RABIT PDGA_RABIT STANDARD; PRT; 213 AA.
ID AC F34007;
DT 01-FEB-1994 (Rel. 28, Created)
DT 01-FEB-1994 (Rel. 28, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Platelet-derived growth factor, A chain precursor (PDGF A-chain)
DE (PDGF-1).
DN PDGFA.
GN GN
OS Oryctolagus cuniculus (Rabbit).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
OX NCBI_TaxID=9986;
RN [1]
SEQUENCE FROM N.A.
RP TISSUE=Vascular smooth muscle;
RC

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RX MEDLINE-92246970; PubMed-1575749;
RA Nakahara K.-I., Nishimura H., Kuro-O M., Takewaki S.-I., Iwase M.,
RA Okubo A., Yazaki Y., Nagai R.;
RT "Identification of three types of PDGF-A chain gene transcripts in
RT rabbit vascular smooth muscle and their regulated expression during
RT development and by angiotensin II."
RL Biochem. Biophys. Res. Commun. 184:811-818(1992).
CC -!- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR
CC CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS
CC AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS
CC RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE
CC IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.
CC -!- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A
CC AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN
CC TRANSFORMATION PROCESSES.
CC -!- ALTERNATIVE PRODUCTS: 3 ISOFORMS; A1, A2 (SHOWN HERE) AND A3; ARE
CC PRODUCED BY ALTERNATIVE SPLICING.
CC -!- INDUCTION: THE FORM A3 IS SELECTIVELY INDUCED BY ANGIOTENSIN II.
CC -!- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE
CC PDGF RECEPTOR.
CC -!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
DR PIR: JS0735; JS0735.
DR PIR: PS0387; PS0387.
DR PIR: JN0248; JN0248.
DR HSP: P01127; 1PDG.
DR InterPro: IPR002400; GF_cysknot.
DR InterPro: IPR000072; PDGF.
DR Pfam: PF00341; PDGF; 1.
DR PRINTS: PR00438; GFCYSKNOT.
DR PRODOM: PD001629; PDGF; 1.
DR SMART: SM00141; PDGF; 1.
DR PROSITE; PS00249; PDGF_1; 1.
DR PROSITE; PS0278; PDGF_2; 1.
KW Glycoprotein; Mitogen; Growth factor; Platelet; Alternative splicing;
KW Signal.
FT SIGNAL.
FT PROPEP 1 20
FT CHAIN 21 89
FT SITE 90 213
FT DISULFID 158 162
FT DISULFID 131 179
FT DISULFID 135 181
FT DISULFID 125 125
FT DISULFID 124 134
FT CARBOHYD 136 136
FT VARSPPLIC 196 198
FT VARSPPLIC 199 213
FT VARSPPLIC 197 213
SQ SEQUENCE 213 AA; 24005 MW; 28A9B7E50487F4C5 CRC64;

Query Match 18.1%; Score 108; DB 1; Length 213;
Best Local Similarity 32.3%; Pred. No. 0.00018;
Matches 32; Conservative 14; Mismatches 41; Indels 12; Gaps 6;

QY 11 CTPNFSVSI-REELKRTDTIP--WPGCLLVKRCGNCACCLHNECCVCPSKYTKYKH 67
Db | : : : | : : : | : : : | : : : | : : : | : : : | : : : | :
98 CTRTVIIEIPRSQDPTSANFLWPPCVKRCVTG--CC--NTSSVKCPSRV---HH 149
QY 68 EVLQLRPXTGVLGHLKSLTDVALEHHEECDCVCRGSTG 106
Db : : : | : : : | : : : | : : : | : : : | : : : | : : : | :
150 RSVKVAEYVKKPK-LKEOVRLHEEHLECAACASSAG 187

RESULT 7
VEGB_HUMAN STANDARD; PRT: 207 AA.
AC P49765; Q16528;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-MAR-2002 (Rel. 41, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Vascular endothelial growth factor B precursor (VEGF-B) (VEGF related
DE factor) (VRF).

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GN VEGFB OR VRF.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS VEGF-B186 AND VEGF-B167).
RC TISSUE=Fetal brain;
RA MEDLINE-97077124; PubMed=8919691;
RX Grimmond S., Lagercrantz J., Drinkwater C., Silins G., Townson S.,
RA Pollock P., Gotley D., Carson E., Rakar S., Nordenskjold M., Ward L.,
RA Hayward N.K., Weber G.;
RT "Cloning and characterization of a novel human gene related to
RT vascular endothelial growth factor.";
RL genome Res. 6:124-131(1996).
RN [2]
RP SEQUENCE FROM N.A. (ISOFORM VEGF-B186).
RC TISSUE=Fibrosarcoma;
RA MEDLINE-96325041; PubMed=8702615;
RX Olofsson B., Pajusola K., von Euler G., Chilov D., Alitalo K.,
RA Eriksson U.;
RT "Genomic organization of the mouse and human genes for vascular
RT endothelial growth factor B (VEGF-B) and characterization of a second
RT splice isoform.";
RL J. Biol. Chem. 271:19310-19317(1996).
RN [3]
RP SEQUENCE FROM N.A. (ISOFORM VEGF-B167).
RC MEDLINE-96197355; PubMed=8637916;
RX Olofsson B., Pajusola K., Kaipainen A., von Euler G., Joukov V.,
RA Sakseila O., Orpana A., Pettersson R.F., Alitalo K., Eriksson U.;
RT "Vascular endothelial growth factor B, a novel growth factor for
RT endothelial cells.";
RL proc. Natl. Acad. Sci. U.S.A. 93:2576-2581(1996).
RN [4]
RP SEQUENCE FROM N.A. (ISOFORM VEGF-B186).
RC TISSUE=Testis;
RA Strausberg R.;
RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: Growth factor for endothelial cells. VEGF-B167 binds
CC heparin and neuropilin-1 whereas the binding to neuropilin-1 of
CC VEGF-B186 is regulated by proteolysis.
CC -!- SUBUNIT: Homodimer; disulfide-linked. Can also form heterodimer
CC with vegf.
CC -!- SUBCELLULAR LOCATION: Secreted but remains associated to cells or
CC to the extracellular matrix unless released by heparin.
CC -!- ALTERNATIVE PRODUCTS: At least 2 isoforms; VEGF-B186 (shown here)
CC and VEGF-B167; are produced by alternative splicing.
CC -!- TISSUE SPECIFICITY: Expressed in all tissues except liver. Highest
CC levels found in heart, skeletal muscle and pancreas.
CC -!- PTM: VEGF-B186 is O-glycosylated (By similarity).
CC -!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
CC -----
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CC -----
DR EMBL; U43368; AAA91462.1; -
DR EMBL; U43369; AAA91463.1; -
DR EMBL; U52819; AAC50721.1; -
DR EMBL; U48801; AAB06274.1; -
DR EMBL; BC008818; AAH08818.1; -
DR HSP; P15692; 1VFP.
DR MIM; 601398; -
DR InterPro: IPR000072; PDGF.
DR Pfam: PF00341; PDGF; 1.
DR PRODOM: PD001629; PDGF; 1.
DR SMART: SM00141; PDGF; 1.
DR PROSITE; PS00249; PDGF_1; 1.
DR PROSITE; PS0278; PDGF_2; 1.

```

KW Mitogen; Growth factor; Glycoprotein; Signal; Heparin-binding;
 KW Alternative splicing; Multigene family.
 FT SIGNAL 1 21 POTENTIAL.
 FT CHAIN 22 207 VASCULAR ENDOTHELIAL GROWTH FACTOR B.
 FT DISULFID 47 89 BY SIMILARITY.
 FT DISULFID 78 122 BY SIMILARITY.
 FT DISULFID 82 124 BY SIMILARITY.
 FT DISULFID 72 72 INTERCHAIN (BY SIMILARITY).
 FT DISULFID 81 81 INTERCHAIN (BY SIMILARITY).
 FT VARSPPLIC 137 188 RAATPHRPOPSRVPWDSPAGCAPADITHPTAPGPSAH
 FT RRSELRGCGRLNLPDTCRCRLRR (IN ISOFORM
 FT VEGF-B167).
 FT VARSPPLIC 189 207 MISSING (IN ISOFORM VEGF-B167).
 SQ SEQUENCE 207 AA; 21602 MW; EDE4B1C0DFDAD6BC CRC64;

Query Match 17.6%; Score 105; DB 1; Length 207;
 Best Local Similarity 30.0%; Pred. NO. 0.00037;
 Matches 27; Conservative 17; Mismatches 34; Indels 12; Gaps 4;

QY 10 SCTPRNFSVSIREEKRT-DTIFWPGCLLYKRCGNCACCLHNCNECOCVPSKYTKYHE 68
 Db 46 TCQPEVVVPLVLMGTAVKQVPSVTVQCGG---CCPD--DGLECVPGQHVRMQ 100
 QY 69 VLQRPKGTGVRGLHKSITDVALEHHECDC 98
 Db 101 ILMIRYPS-----SQLGEMSLSEHHSQCCEC 124

RESULT 8
 PDGA_XENLA STANDARD; PRT; 226 AA.
 AC P13698;
 DT 01-JAN-1990 (Rel. 13, Created)
 DT 01-JAN-1990 (Rel. 13, Last sequence update)
 DT 01-MAR-2002 (Rel. 41, Last annotation update)
 DE Platelet-derived growth factor, A chain precursor (PDGF A-chain) (PDGFA).
 OS Xenopus laevis (African clawed frog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipiloidea; Pipidae;
 OC Xenopodinae; Xenopus.
 OX NCBI_TaxID=8355;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Oocyte;
 RX MEDLINE=88321676; PubMed=3413486;
 RA Mercola M., Melton D.A., Stiles C.D.;
 RT "Platelet-derived growth factor A chain is maternally encoded in xenopus embryos."
 RL Science 241:1223-1225(1988).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Oocyte;
 RX MEDLINE=90175018; PubMed=2308861;
 RA Bejcek B.E., Li D.Y., Deuel T.F.;
 RT "Nucleotide sequence of a cDNA clone of xenopus platelet-derived growth factor A-chain".
 RL Nucleic Acids Res. 18:680-680(1990).
 CC -1- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.
 CC -1- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN TRANSFORMATION PROCESSES.
 CC -1- ALTERNATIVE PRODUCTS: 2 isoforms: a long form (shown here) and a short form; are produced by alternative splicing.
 CC -1- DOMAIN: The long form contains a basic insert which acts as a cell retention signal.
 CC -1- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE

CC PDGF RECEPTOR.
 CC -1- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
 CC -----
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 CC -----
 DR EMBL; M23237; AAA49927.1; -;
 DR EMBL; M23238; AAA49928.1; -;
 DR EMBL; X17545; CAA35583.1; -;
 DR PIR; S08220; S08220.
 DR HSP; P01127; 1PBG.
 DR InterPro; IPR002400; GF_cysknot.
 DR InterPro; IPR000072; PDGF.
 DR Pfam; PF00341; PDGF; 1.
 DR PRINTS; PR00438; GFCYSKNOT.
 DR ProDom; PD01629; PDGF; 1.
 DR SMART; SM00141; PDGF; 1.
 DR PROSITE; PS00249; PDGF_1; 1.
 DR PROSITE; PS00278; PDGF_2; 1.
 KW Glycoprotein; Mitogen; Growth factor; Platelet; Alternative splicing;
 KW Signal.
 FT SIGNAL 1 22
 FT PROPEP 23 91 REMOVED BY PROTEOLYSIS.
 FT CHAIN 92 226 PLATELET-DERIVED GROWTH FACTOR, A CHAIN.
 FT DISULFID 101 145 BY SIMILARITY.
 FT DISULFID 134 182 BY SIMILARITY.
 FT DISULFID 138 184 BY SIMILARITY.
 FT DISULFID 128 128 INTERCHAIN (BY SIMILARITY).
 FT DISULFID 137 137 INTERCHAIN (BY SIMILARITY).
 FT CARBOHYD 139 139 N-LINKED (GLCNAC...) (PROBABLE).
 FT VARSPPLIC 198 200 GFF -> DVR (IN SHORT ISOFORM).
 FT VARSPPLIC 201 226 MISSING (IN SHORT ISOFORM).
 FT CONFLICT 199 209 MISSING (IN REF. 2).
 FT CONFLICT 218 218 Q -> R (IN REF. 2).
 SQ SEQUENCE 226 AA; 25719 MW; E3E724FC6F67C2FB2 CRC64;

Query Match 17.6%; Score 105; DB 1; Length 226;
 Best Local Similarity 31.4%; Pred. NO. 0.0004;
 Matches 33; Conservative 14; Mismatches 32; Indels 26; Gaps 8;

QY 11 CTPRNFVSII-REELKRTDTIF--WPGCLLYKRCGNCACCLHNCNECOCVPSKYTKYH 67
 Db 101 CKRTVIYEIPRSQIDPTSANFLIWPCCVEVKRCTG---CC--NTSSVKCQPSRI---HH 152
 QY 68 -----EVLQRPKGTGVRGLHKSITDVALEHHECDCVCRGST 104
 Db 153 RSVKVKVEYVRKKPK-----LKEVL--VRLEHLECTCTANSNS 190

RESULT 9
 PDGB_HUMAN STANDARD; PRT; 241 AA.
 AC P01127; P78431;
 DT 21-JUL-1986 (Rel. 01, Created)
 DT 21-JUL-1986 (Rel. 01, Last sequence update)
 DT 16-OCT-2001 (Rel. 40, Last annotation update)
 DE Platelet-derived growth factor, B chain precursor (PDGF B-chain) (PDGF-2) (C-sis) (Becaplermin).
 DE PDGFB OR SIS.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=84250225; PubMed=6740330;
 RA Josephs S.F., Ratner L., Clarke M.F., Westin E.H., Reitz M.S.,

RA Wong-Staal F.;
 RT "transforming potential of human c-sis nucleotide sequences encoding
 RL platelet-derived growth factor.";
 RN Science 225:636-639(1984).
 [2]
 RP SEQUENCE FROM N.A.
 RA MEDLINE=86205961; PubMed=3517869;
 RX Rao C.D., Igarashi H., Chiu I.-M., Robbins K.C., Aaronson S.A.;
 RT "Structure and sequence of the human c-sis/platelet-derived growth
 RL factor 2 (SIS/PDGF2) transcriptional unit.";
 RN Proc. Natl. Acad. Sci. U.S.A. 83:2392-2396(1986).
 [3]
 RP SEQUENCE OF 22-241 FROM N.A.
 RA MEDLINE=84205633; PubMed=6327048;
 RX Chiu I.-M., Reddy E.P., Givol D., Robbins K.C., Tronick S.R.,
 RA Aaronson S.A.;
 RT "Nucleotide sequence analysis identifies the human c-sis
 RL proto-oncogene as a structural gene for platelet-derived growth
 RT factor.";
 RN Cell 37:123-129(1984).
 [4]
 RP SEQUENCE FROM N.A.
 RA MEDLINE=85296313; PubMed=4033772;
 RX Collins T., Ginsburg D., Ross J.M., Orkin S.H., Pober J.S.;
 RT "Cultured human endothelial cells express platelet-derived growth
 RL factor B chain: cDNA cloning and structural analysis.";
 RN Nature 316:748-750(1985).
 [5]
 RP SEQUENCE FROM N.A.
 RA MEDLINE=85269623; PubMed=2991848;
 RX Ratner L., Josephs S.F., Jarrett R., Reitz M.S., Wong-Staal F.;
 RT "Nucleotide sequence of transforming human c-sis cDNA clones with
 RL homology to platelet-derived growth factor.";
 RN Nucleic Acids Res. 13:5007-5018(1985).
 [6]
 RP SEQUENCE FROM N.A.
 RA MEDLINE=87217119; PubMed=3472769;
 RX Rao C.D., Igarashi H., Pech M.W., Robbins K.C., Aaronson S.A.;
 RT "Oncogenic potential of the human platelet-derived growth factor
 RL transcriptional unit.";
 RN Cold Spring Harb. Symp. Quant. Biol. 51:959-966(1986).
 [7]
 RP SEQUENCE FROM N.A.
 RA Burgess J., Odell C.;
 RL Submitted (OCT-1996) to the EMBL/GenBank/DBJ databases.
 [8]
 RP SEQUENCE OF 1-53 FROM N.A.
 RA MEDLINE=97141927; PubMed=8988177;
 RX Simon M.P., Pedoutour F., Sirvent N., Grosgeorge J., Minoletti F.,
 RA Colindre J.-M., Terrier-Lacombe M.-J., Mandahl N., Craver R.D.,
 RA Blin N., Sozzi G., Turc-Carel C., O'Brien K.P., Kedra D.,
 RA Fransson I., Guilbaud C., Dumanski J.P.;
 RT "Deregulation of the platelet-derived growth factor B-chain gene via
 RL fusion with collagen gene COL1A1 in dermatofibrosarcoma protuberans
 RL and giant-cell fibroblastoma.";
 RN Nat. Genet. 15:95-98(1997).
 [9]
 RP SEQUENCE OF 26-241 FROM N.A.
 RA MEDLINE=86164981; PubMed=3456904;
 RX Welch H.A., Seibald W., Schairer H.U., Hoppe J.;
 RT "The human osteosarcoma cell line U-2 OS expresses a 3.8.kilobase
 RL mRNA which codes for the sequence of the PDGF-B chain.";
 RN FEBS Lett. 198:344-348(1986).
 [10]
 RP SEQUENCE OF 153-200 FROM N.A., AND PARTIAL SEQUENCE.
 RX MEDLINE=84236121; PubMed=6329745;
 RA Johnson A., Heldin C.H., Westerman A., Westerman B., Deuel T.F.,
 RA Huang J.S., Seeburg P.H., Gray A., Ullrich A., Scrase G.,
 RA Stroobant P., Waterfield M.D.;
 RT "The c-sis gene encodes a precursor of the B chain of
 RL platelet-derived growth factor.";
 RL EMBO J. 3:921-928(1984).
 [11]

RP SEQUENCE OF 82-110.
 RX MEDLINE=83197379; PubMed=6844921;
 RA Antonlades H.N., Hunkapiller M.W.;
 RT "Human platelet-derived growth factor (PDGF): amino-terminal amino
 RL acid sequence.";
 RN Science 220:963-965(1983).
 [12]
 RP SEQUENCE OF 82-112.
 RX MEDLINE=83244981; PubMed=6306471;
 RA Waterfield M.D., Scrase G.T., Whittle N., Stroobant P., Johnson A.,
 RA Westerman A., Westerman B., Heldin C.H., Huang J.S., Deuel T.F.;
 RT "Platelet-derived growth factor is structurally related to the
 RL putative transforming protein p28sis of simian sarcoma virus.";
 RN Nature 304:35-39(1983).
 [13]
 RP MUTAGENESIS, AND IMPORTANCE OF ARG-108 AND ILE-111 FOR RECEPTOR
 BINDING.
 RX MEDLINE=92097530; PubMed=1661670;
 RA Clements J.M., Hawden L.J., Bloxidge R.E., Catlin G., Cook A.L.,
 RA Craig S., Drummond A.H., Edwards R.M., Fallon A., Green D.R.,
 RA Hellewell P.G., Kirwin P.M., Nayee P.D., Richardson S.J., Brown D.,
 RA Chahwala S.B., Snarey M., Winslow D.;
 RT "Two PDGF-B chain residues, arginine 27 and isoleucine 30, mediate
 RL receptor binding and activation.";
 RN EMBO J. 10:4113-4120(1991).
 [14]
 RP INTERCHAIN DISULFIDE BONDS.
 RX MEDLINE=92283833; PubMed=1317862;
 RA Andersson M., Oestman A., Baekstroem G., Hellman U.,
 RA George-Nascimento C., Westerman B., Heldin C.H.;
 RT "Assignment of interchain disulfide bonds in platelet-derived growth
 RL factor (PDGF) and evidence for agonist activity of monomeric PDGF.";
 RN J. Biol. Chem. 267:11260-11266(1992).
 [15]
 RP X-RAY CRYSTALLOGRAPHY (3.0 ANGSTROMS).
 RX MEDLINE=93010987; PubMed=1396586;
 RA Oefner C., D'Arcy A., Winkler F.K., Eggmann B., Hosang M.;
 RT "Crystal structure of human platelet-derived growth factor BB.";
 RN EMBO J. 11:3921-3926(1992).
 CC -!- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR
 CC CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS
 CC AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS
 CC RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE
 CC IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.
 CC -!- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A
 CC AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN
 CC TRANSFORMATION PROCESSES.
 CC -!- PHARMACEUTICAL: Available under the name Regranex (Ortho-McNeil).
 CC Used to promote healing in diabetic neuropathic foot ulcers.
 CC -!- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE
 CC PDGF RECEPTOR.
 CC -!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
 CC -!- DATABASE: NAME-R&D Systems' cytokine source book: PDGF;
 CC WWW="http://www.rndsystems.com/asp/g_sitebuilder.asp?bodyId=220".
 CC -!- DATABASE: NAME-Regranex; NOTE-Clinical information on Regranex;
 CC WWW="http://www.regranex.com/".
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 CC -----
 CC EMBL; K01401; AAA60552.1;
 DR EMBL; K01918; AAA60552.1; JOINED.
 DR EMBL; J00121; AAA60552.1; JOINED.
 DR EMBL; K01398; AAA60552.1; JOINED.
 DR EMBL; K01399; AAA60552.1; JOINED.
 DR EMBL; K01400; AAA60552.1; JOINED.
 DR EMBL; X02811; CAA26579.1;
 DR EMBL; M12783; AAA60553.1;

```
[2]
RN RA RP REVISIONS.
RA van den Ouweland A.M.W.:
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR
CC CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS
CC AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS
CC RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE
CC IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.
CC -!- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A
CC AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN
CC TRANSFORMATION PROCESSES.
CC -!- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE
CC PDGF RECEPTOR.
CC -!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
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CC -----
CC EMBL; X05112; CAA28758.1; ALT_SEQ.
DR PIR; A26402; TVCTSS.
DR HSPG; P01127; IPDG.
DR InterPro; IPR002400; GF_cysknot.
DR InterPro; IPR000072; PDGF.
DR Pfam; PF00341; PDGF_1.
DR PRINTS; PR00438; GFCYSKNOT.
DR ProDom; PD001629; PDGF; 1.
DR SMART; SM00141; PDGF; 1.
DR PROSITE; PS00249; PDGF_1; 1.
DR PROSITE; PS00278; PDGF_2; 1.
KW Mitogen; Growth factor; Proto-oncogene; Platelet; Signal.
FT SIGNAL 1 20
FT PROPEP 21 81
FT CHAIN 82 194
FT PROPEP 195 245
FT DISULFID 101 145
FT DISULFID 134 182
FT DISULFID 138 184
FT DISULFID 128 128
FT DISULFID 137 137
SQ SEQUENCE 245 AA; 27787 MW; E7715291D9837312 CRC64;
                                     17.6%; Score 105; DB 1; Length 245;
Query Match Best Local Similarity 33.0%; Pred. No. 0.00043;
Matches 35; Conservative 13; Mismatches 36; Indels 22; Gaps 8;
QY 2 LTEEVRLSYCTPRN--FSVSIREELKRDTIF--WPCLLLVKRGNGCAACLHNCNEQC 57
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 92 VAEPAMIAECKTRTEVFVS--RRLIDRTNANFLWPPCVQVRCSG---CC--NNRVQC 145
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 58 VPskvTKKY-----HEVLQLRPKTGVGRGLHKSLTDVALEHHBECDC 98
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 146 RPTQVQLRLVQVRKIEIVRKRP-----VFKKAT-VTLDELHACKC 184
   : : : : : : : : : : : : : : : : : : : : : : : : : : : :
RESULT 11
VEGA_HUMAN STANDARD; PRT; 232 AA.
AC AC P15692; Q16889; O60720; O75875; Q9U123; Q9UH58; Q9HIW9; Q9HIW8;
DT 01-APR-1990 (Rel. 14, Created)
DT 01-MAR-2002 (Rel. 41, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Vascular endothelial growth factor A precursor (VEGF-A) (Vascular
DN permeability factor) (VPF).
GN VEGF OR VEGFA.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
```

OC Mammalia: Eutheria; Primates; Catarrhini; Hominiidae; Homo.
OX NCBI_TaxID=9606;
[1]
RN SEQUENCE FROM N.A. (ISOFORMS VEGF189 AND VEGF165).
RP MEDLINE=90069608; PubMed=2479986;
RX Leung D.W., Cachianes G., Kuang W.-J., Goeddel D.V., Ferrara N.;
RT "Vascular endothelial growth factor is a secreted angiogenic
mitogen.";
RL Science 246:1306-1309(1999).
[2]
RN SEQUENCE FROM N.A. (ISOFORM VEGF189), AND PARTIAL SEQUENCE.
RP MEDLINE=90069609; PubMed=2479987;
RX Keck P.J., Hauser S.D., Krivi G., Sanzo K., Warren T., Feder J.,
RA Connolly D.T.;
RT "Vascular permeability factor, an endothelial cell mitogen related to
PDGF.";
RL Science 246:1309-1312(1989).
[3]
RN SEQUENCE FROM N.A. (ISOFORM VEGF189).
RX MEDLINE=91268072; PubMed=1711045;
RA Tischner E., Mitchell R., Hartman T., Silva M., Gospodarowicz D.,
RA Fiddes J.C., Abraham J.A.;
RT "The human gene for vascular endothelial growth factor. Multiple
protein forms are encoded through alternative exon splicing.";
RL J. Biol. Chem. 266:11947-11954(1991).
[4]
RN SEQUENCE FROM N.A. (ISOFORM VEGF206).
RX MEDLINE=92168017; PubMed=1791831;
RA Houck K.A., Ferrara N., Winer J., Cachianes G., Li B., Leung D.W.;
RT "The vascular endothelial growth factor family: identification of a
fourth molecular species and characterization of alternative splicing
of RNA.";
RL Mol. Endocrinol. 5:1806-1814(1991).
[5]
RN SEQUENCE FROM N.A. (ISOFORM VEGF165).
RX MEDLINE=92231879; PubMed=1567395;
RA Weindel K., Marne D., Welch H.A.;
RT "AIDS-associated Kaposi's sarcoma cells in culture express vascular
endothelial growth factor.";
RL Biochem. Biophys. Res. Commun. 183:1167-1174(1992).
[6]
RN SEQUENCE FROM N.A. (ISOFORM VEGF145).
RX MEDLINE=97207275; PubMed=9054410;
RA Poltorak Z., Cohen T., Sivan R., Kandelis Y., Spira G., Vlodavsky I.,
RA Keshet E., Neufeld G.;
RT "VEGF145, a secreted vascular endothelial growth factor isoform that
binds to extracellular matrix.";
RL J. Biol. Chem. 272:7151-7158(1997).
[7]
RN SEQUENCE FROM N.A. (ISOFORM VEGF183).
RP TISSUE=Kidney;
RX MEDLINE=99096474; PubMed=9878851;
RA Lei J., Jiang A., Pei D.;
RT "Identification and characterization of a new splicing variant of
vascular endothelial growth factor: VEGF183.";
RL Biochim. Biophys. Acta 1443:400-406(1998).
[8]
RN SEQUENCE FROM N.A. (ISOFORM VEGF165).
RP TISSUE=Breast;
RX MEDLINE=98119755; PubMed=9450968;
RA Claffey K.P., Shih S.-C., Mullen A., Dziennis S., Cusick J.L.,
RA Abrams K.R., Lee S.W., DeMar M.;
RT "Identification of a human VPF/VEGF 3' untranslated region mediating
hypoxia-induced mRNA stability.";
RL Mol. Biol. Cell 9:469-481(1998).
[9]
RN SEQUENCE OF 114-209 FROM N.A. (ISOFORM VEGF183).
RP TISSUE=Retina;
RX MEDLINE=99165303; PubMed=10067980;
RA Jingjing L., Xue Y., Agarwal N., Roque R.S.;
RT "Human Muller cells express VEGF183, a novel spliced variant of
vascular endothelial growth factor.";
RL Invest. Ophthalmol. Vis. Sci. 40:752-759(1999).

[10]
RN SEQUENCE FROM N.A. (ISOFORM VEGF165).
RP TISSUE=Hemangioendothelioma;
RX Murata H., Fukushima J., Hattori S., Okuda K., Yanagi H.;
RT "Human cDNA for the vascular endothelial growth factor isoform
VEGF165.";
RL Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.
[11]
RN SEQUENCE FROM N.A. (ISOFORM VEGF148).
RP TISSUE=Renal glomerulus;
RX MEDLINE=99394945; PubMed=10464055;
RA Whittle C.J., Gillespie K.M., Harrison R., Mathieson P.W.,
RA Harper S.J.;
RT "Heterogeneous vascular endothelial growth factor (VEGF) isoform mRNA
and receptor mRNA expression in human glomeruli, and the
identification of VEGF148 mRNA, a novel truncated splice variant.";
RL Clin. Sci. 97:303-312(1999).
[12]
RN SEQUENCE FROM N.A. (ISOFORM VEGF121).
RX Sato J.D., Whitney R.G.;
RT "Human cDNA for vascular endothelial growth factor isoform VEGF121.";
RL Submitted (DEC-1999) to the EMBL/GenBank/DBJ databases.
[13]
RN SEQUENCE FROM N.A.
RP Williams S.;
RL Submitted (DEC-2000) to the EMBL/GenBank/DBJ databases.
[14]
RN PRELIMINARY SEQUENCE OF 27-36; 43-50 AND 59-81.
RX MEDLINE=90062112; PubMed=2584205;
RA Connolly D.T., Olander J.V., Heuvelman D., Nelson R., Monsell R.,
RA Siegel N., Haymore B.L., Leimgruber R., Feder J.;
RT "Human vascular permeability factor. Isolation from U937 cells.";
RL J. Biol. Chem. 264:20017-20024(1989).
[15]
RN SEQUENCE OF 27-41.
RX MEDLINE=93145946; PubMed=7678805;
RA Fiebig B.L., Jaeger B., Schoellmann C., Weindel K., Wilting J.,
RA Kochs G., Marne D., Hug H., Welch H.A.;
RT "Synthesis and assembly of functionally active human vascular
endothelial growth factor homodimers in insect cells.";
RL Eur. J. Biochem. 211:19-26(1993).
[16]
RN X-RAY CRYSTALLOGRAPHY (2.5 ANGSTROMS) OF 34-135.
RX MEDLINE=97352774; PubMed=9207067;
RA Muller Y.A., Li B., Christinger H.W., Wells J.A., Cunningham B.C.,
RA de Vos A.M.;
RT "Vascular endothelial growth factor: crystal structure and functional
mapping of the kinase domain receptor binding site.";
RL Proc. Natl. Acad. Sci. U.S.A. 94:7192-7197(1997).
[17]
RN X-RAY CRYSTALLOGRAPHY (1.93 ANGSTROMS) OF 34-135.
RX MEDLINE=98035455; PubMed=9351807;
RA Muller Y.A., Christinger H.W., Keyt B.A., de Vos A.M.;
RT "The crystal structure of vascular endothelial growth factor (VEGF)
refined to 1.93-A resolution: multiple copy flexibility and receptor
binding.";
RL Structure 5:1325-1338(1997).
[18]
RN X-RAY CRYSTALLOGRAPHY (1.9 ANGSTROMS) OF 39-134.
RX MEDLINE=99119204; PubMed=9922142;
RA Wiesmann C., Christinger H.W., Cochran A.G., Cunningham B.C.,
RA Fairbrother W.J., Keenan C.J., Meng G., de Vos A.M.;
RT "Crystal structure of the complex between VEGF and a receptor-blocking
peptide.";
RL Biochemistry 37:17765-17772(1998).
[19]
RN STRUCTURE BY NMR OF 34-135.
RX MEDLINE=97477915; PubMed=9336848;
RA Fairbrother W.J., Champe M.A., Christinger H.W., Keyt B.A.,
RA Starovasnik M.A.;
RT "1H, 13C, and 15N backbone assignment and secondary structure of the
receptor-binding domain of vascular endothelial growth factor.";
RL Protein Sci. 6:2250-2260(1997).

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RN [20]
RX STRUCTURE BY NMR OF 137-215.
RA MEDLINE-98298440; PubMed-9634701;
RA Pairbrother W.J., Champe M.A., Christinger H.W., Keyt B.A.,
RA Starovasnik M.A.;
RT "Solution structure of the heparin-binding domain of vascular
RL endothelial growth factor."
RL Structure 6:637-648(1998).
RN [21]
RX FUNCTION
RX MEDLINE-21320570; PubMed-11427521;
RA Murphy J.F., Fitzgerald D.J.;
RA "Vascular endothelial growth factor induces cyclooxygenase-dependent
RT proliferation of endothelial cells via the VEGF-2 receptor."
RL FASEB J. 15:1667-1669(2001).
CC -1- FUNCTION: Growth factor active in angiogenesis, vasculogenesis and
CC endothelial cell growth. It induces endothelial cell
CC proliferation, promotes cell migration, inhibits apoptosis, and
CC induces permeabilization of blood vessels. It binds to the
CC VEGFR1/Flt-1 and VEGFR2/Kdr receptors and to heparan sulfate and
CC heparin. Neupilin-1 binds isoforms VEGF-165 and VEGF-145.
CC -1- SUBUNIT: Homodimer; disulfide-linked. Also found as heterodimer
CC with PlGF (By similarity).
CC -1- SUBCELLULAR LOCATION: VEGF121 is acidic and freely secreted.
CC VEGF165 is more basic, has heparin-binding properties and,
CC although a significant proportion remains cell-associated, most is
CC freely secreted. VEGF189 is very basic; it is cell-associated
CC after secretion and is bound avidly by heparin and the
CC extracellular matrix, although it may be released as a soluble
CC form by heparin, heparinase or plasmin.
CC -1- ALTERNATIVE PRODUCTS: 7 isoforms; VEGF206 (shown here), VEGF189,
CC VEGF183, VEGF165/VEGF, VEGF148, VEGF145 and VEGF121; may be
CC produced by alternative splicing.
CC -1- TISSUE SPECIFICITY: The VEGF189, VEGF-165 and VEGF-121 isoforms
CC are widely expressed, whereas the VEGF206 and VEGF-145 are
CC uncommon.
CC -1- INDUCTION: Regulated by growth factors, cytokines, gonadotropins,
CC nitric oxide, hypoxia, hypoglycemia and oncogenic mutations.
CC -1- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
CC -1- DATABASE: NAMP-R&D Systems' cytokine mini-reviews: VEGF;
CC WWW="http://www.indsystems.com/asp/q_sitebuilder.asp?bodyId=230".
CC -----
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CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC Query Match 17.5%; Score 104.5; DB 1; Length 232;
CC Best Local Similarity 27.0%; Pred. No. 0.00046;
CC Matches 24; Conservative 21; Mismatches 33; Indels 11; Gaps 4;
QY 11 CTPRNFVSIREEL-KRTDTIFWPGCLLVKRCGNCACCLHNCNECCVPSKVKRYHEV 69
DQ 52 CHPIETLVDFQEPDEIEVFKPSCVPLMRCG---CC--NDEGLECVPTESNITMQI 106
QY 70 LQLRPKTVGRGLKSLTDVALEHHECDC 98
DQ 107 MRKPHQG-----QHIGEMSFLQHNKCEC 130
RESULT 12
PDGA_RAT
ID PDGA_RAT STANDARD; PRT; 204 AA.
AC P28576;
DT 01-DEC-1992 (Rel. 24, Created)
DT 01-FEB-1994 (Rel. 28, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Platelet-derived growth factor, A chain precursor (PDGF A-chain)
DE (PDGF-1).
GN PDGFA OR RPAL.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]

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RP SEQUENCE OF 8-204 FROM N.A.
RX MEDLINE-93305723; PubMed-8318539;
RA Herren B., Weyer K.A., Rouge M., Loetscher P., Pech M.;
RT "Conservation in sequence and affinity of human and rodent PDGF
RL ligands and receptors."
RL Biochim. Biophys. Acta 1173:294-302(1993).
RN [2]
RX SEQUENCE FROM N.A.
RX MEDLINE-93191115; PubMed-8447423;
RA Katayose D., Ohe M., Yamauchi K., Ogata M., Shirato K., Fujita H.,
RA Shibahara S., Takishima T.;
RT "Increased expression of PDGF A- and B-chain genes in rat lungs with
RL hypoxic pulmonary hypertension."
RL Am. J. Physiol. 264:L100-L106(1993).
RN [3]
RX SEQUENCE FROM N.A. (SHORT FORM).
RX Xia Y., Feng L., Tang W.W., Wilson C.B.;
RT "Cloning and expression of rat platelet-derived growth factor
RL A-chain."
RL J. Am. Soc. Nephrol. 3:622-622(1992).
RN [4]
RX SEQUENCE OF 58-196 FROM N.A. (SHORT FORM).
RX STRAIN-FISCHER 344; TISSUE-Smooth muscle;
RA MEDLINE-93225389; PubMed-8469035;
RA Szabo P., Weksler D., Whittington E., Weksler B.B.;
RT "The age-dependent proliferation of rat aortic smooth muscle cells is
RL independent of differential splicing of PDGF A-chain mRNA."
RL Mech. Ageing Dev. 67:79-89(1993).
CC -1- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR
CC CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS
CC AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS
CC RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE
CC IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.
CC -1- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A
CC AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN
CC TRANSFORMATION PROCESSES.
CC -1- ALTERNATIVE PRODUCTS: 2 isoforms; a long form (shown here) and a
CC short form; are produced by alternative splicing.
CC -1- DEVELOPMENTAL STAGE: IN KIDNEY EPITHELIAL TISSUES, THE SHORTER
CC FORM PREDOMINATES IN YOUNG (1 DAY OLD) RATS WHILE THE LONGER FORM
CC BECOMES MORE PREVALENT DURING AGING.
CC -1- DOMAIN: The long form contains a basic insert which acts as a cell
CC retention signal.
CC -1- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE
CC PDGF RECEPTOR.
CC -1- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
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CC EMBL; L06894; AAB59693.1; -
CC EMBL; Z14120; CAA78490.1; -
CC EMBL; D10106; BAA00987.1; -
CC EMBL; L06238; AAA41932.1; -
CC EMBL; S57864; AAB26134.2; -
CC HSSP; P01127; IPDG.
CC InterPro; IPR002400; GF_cysknot.
CC InterPro; IPR000072; PDGF.
CC Pfam; PF00341; PDGF; 1.
CC PRINTS; PR00438; GFCYSKNOT.
CC ProDom; PD001629; PDGF; 1.
CC SMART; SM00141; PDGF; 1.
CC PROSITE; PS00249; PDGF_1; 1.
CC PROSITE; PS0278; PDGF_2; 1.
CC Glycoprotein; Mitogen; Growth factor; Platelet; Alternative splicing;
CC Signal.
CC SIGNAL 1 20 BY SIMILARITY.
CC PROPEP 21 85 REMOVED BY PROTEOLYSIS.

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FT CHAIN      86   204 PLATELET-DERIVED GROWTH FACTOR, A CHAIN.
FT SITE       158  162 RECEPTOR BINDING SITE (POTENTIAL).
FT DISULFID   96   140 BY SIMILARITY.
FT DISULFID  129  177 BY SIMILARITY.
FT DISULFID  133  179 BY SIMILARITY.
FT DISULFID  123  132 INTERCHAIN (BY SIMILARITY.).
FT DISULFID  132  132 INTERCHAIN (BY SIMILARITY.).
FT CARBOHYD   134  134 N-LINKED (GLCNAC.. ) (BY SIMILARITY.).
FT VARSPPLIC 194  196 MISSING (IN SHORT ISOFORM).
FT VARSPPLIC 197  204 GRSS -> DVR (IN SHORT ISOFORM).
FT CONFLICT   85   111 KRISGEIAPVCKTRTIVIEPRSQVD -> REVLRKPFPPQ
                                     FARPGRSFYRLGARWT (IN REF. 2).
FT CONFLICT  119  119 I -> T (IN REF. 3).
FT SEQUENCE  204 AA; 23307 MW; FA413F74E86F742C CRC64;

Query Match          17.4%; Score 104; DB 1; Length 204;
Best Local Similarity 34.0%; Pred.No.0.00046;
Matches 32; Conservative 12; Mismatches 34; Indels 16; Gaps 6;

QY 11 CTPNFSVSIT-REELKRTDTIF--WPGCLLVKRGCGMACCLHNCQCVCPSKV---TK 64
    | :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :
Db 96 CKRTVTIYEIPRSQVDPTSANFLIWPPCVVKRGTG--CC-NTSSVKQPISRVRHSV 150
    | :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :
QY 65 KYHEVLQLRKPTGVURLHLKSLTDVALEHHCEDC 98
    | :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :
Db 151 KVAKVEYVRKKPKLKEY-----QVRLEEHECAC 179

RESULT 13
PDGA_HUMAN STANDARD; PRT; 211 AA.
ID PDGA_HUMAN AC P04085;
DT DT 01-NOV-1986 (Rel. 03, Created)
DT DT 01-NOV-1986 (Rel. 03, Last sequence update)
DT DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Platelet-derived growth factor, A chain precursor (PDGF A-chain)
DE {PDGFA}.
DE OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_Taxid=9606;
RN [1]
RX MEDLINE=88144463; PubMed=3422746;
RA Bontron D.T., Morton C.C., Orkin S.H., Collins T.;
RT "Platelet-derived growth factor A chain: gene structure, chromosomal
RL location, and basis for alternative mRNA splicing.";
RL Proc. Natl. Acad. Sci. U.S.A. 85;1492-1496(1988).
RN [2]
RX SEQUENCE FROM N.A.
RP MEDLINE=88174698; PubMed=2832727;
RR Rorsman F., Bywater M., Knott T.J., Scott J., Betsholtz C.;
RA "Structural characterization of the human platelet-derived growth
RT factor A-chain cDNA and gene: alternative exon usage predicts two
RL different precursor proteins.";
RM Mol. Cell. Biol. 8:571-577(1988).
RN [3]
RX SEQUENCE FROM N.A.
RP MEDLINE=86203630; PubMed=3754619;
RR Betsholtz C., Johansson A., Heldin C.H., Westermark B., Lind P.,
RA Urdea M.S., Eddy R., Shows T.B., Philpott K., Mellor A.L., Knott T.J.,
RR Scott J.;
RT "cDNA sequence and chromosomal localization of human platelet-derived
RL growth factor A-chain and its expression in tumour cell lines.";
RL Nature 320:695-699(1986).
RN [4]
RX SEQUENCE FROM N.A.
RP MEDLINE=88030061; PubMed=3666150;
RR Hoppe J., Schumacher L., Eichner W., Weich H.A.;
RA "The long 3'-untranslated regions of the PDGF-A and -B mRNAs are only
RT distantly related.";
```

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DR EMBL; M1989; AAA60047.1; .
DR EMBL; M21571; AAA60047.1; JOINED.
DR EMBL; M1984; AAA60047.1; JOINED.
DR EMBL; M1985; AAA60047.1; JOINED.
DR EMBL; M1986; AAA60047.1; JOINED.
DR EMBL; M1987; AAA60047.1; JOINED.
DR EMBL; A09204; CAA00830.1; .
DR EMBL; S62078; AAB26566.1; .
DR PIR; A28964; PFHUG1.
DR PIR; B28964; B28964.
DR HSSP; P01127; LPDG.
DR MIM; I73430; .
DR InterPro; IPR002400; GF_cysknot.
DR InterPro; IPR000072; PDGF.
DR Pfam; PF00341; PDGF; 1.
DR PRINTS; PR00438; GFCYSKNOT.
DR PRODOM; PD001629; PDGF; 1.
DR SMART; SM00141; PDGF; 1.
DR PROSITE; PS00249; PDGF_1; 1.
DR PROSITE; PS0278; PDGF_2; 1.
KW Glycoprotein; Mitogen; Growth factor; Platelet; Alternative splicing;
FT SIGNAL.
FT PROPEP 1 20
FT CHAIN 21 86
FT SITE 87 211
FT DISULFID 96 140
FT DISULFID 129 177
FT DISULFID 133 179
FT DISULFID 133 123
FT DISULFID 132 132
FT CARBOHYD 134 134
FT VARSPLIC 134 196
FT VARSPLIC 197 211
FT CONFLICT 64 66
FT SEQUENCE 211 AA; 24043 MW; 48633DDE58EFA43 CRC64;

Query Match 17.4%; Score 104; DB 1; Length 211;
Best Local Similarity 34.0%; Pred. No. 0.00048;
Matches 32; Conservative 12; Mismatches 34; Indels 16; Gaps 6;

QY 11 CTPRNFVSI-REELKRTDIP--WPGCLLVRCGNCACCLHNCOCVPSKV---TK 64
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 96 CKTRTVIYIPRSDVPTSANFLIWPCEVVRCTG---CC--NTSSVKCQPSRVHRSV 150
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 65 KYHEVLQLRPKTVGRLHLSLTDVALEHHECCD 98
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 151 KVAKVEYVRKPKLREV-----QVRLEHLECAC 179
| | | | | | | | | | | | | | | | | | | | | | | | | | | |

RESULT 14
PDGA_MOUSE
ID PDGA_MOUSE STANDARD; PRT; 211 AA.
AC P20033;
DT 01-FEB-1991 (Rel. 17, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Platelet-derived growth factor, A chain precursor (PDGF A-chain) (PDGF-1).
DE PDGFA.
GN Mus musculus (Mouse).
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A. (LONG AND SHORT FORMS).
RC STRAIN=BALE/C;
RX MEDLINE=94031105; PubMed=1340209;
RA Rorsman F., Betscholtz C.;
RT "Characterization of the mouse PDGF A-chain gene. Evolutionary
RT conservation of gene structure, nucleotide sequence and alternative
RT splicing.";
```

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RL Growth Factors 6:303-313(1992).
RN [2]
RP SEQUENCE FROM N.A. (SHORT FORM).
RC STRAIN=P9.
RX MEDLINE=90169294; PubMed=2155144;
RA Mercola M., Wang C., Kelly J., Brownlee C., Jackson-Grusby L.,
RT Stiles C., Bowen-Pope D.;
RT "Selective expression of PDGF A and its receptor during early mouse
RT embryogenesis."
RL Dev. Biol. 138:114-122(1990).
CC -!- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR
CC CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS
CC AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS
CC RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE
CC IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEALS THE WOUND.
CC -!- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A
CC AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN
CC TRANSFORMATION PROCESSES.
CC -!- ALTERNATIVE PRODUCTS: 2 isoforms; a long form (shown here) and a
CC short form; are produced by alternative splicing.
CC -!- DOMAIN: The long form contains a basic insert which acts as a cell
CC retention signal.
CC -!- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE
CC PDGF RECEPTOR.
CC -!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; S66873; AAB28740.2; .
DR EMBL; S66868; AAB28740.2; JOINED.
DR EMBL; S66869; AAB28740.2; JOINED.
DR EMBL; S66870; AAB28740.2; JOINED.
DR EMBL; S66871; AAB28740.2; JOINED.
DR EMBL; S66872; AAB28740.2; JOINED.
DR EMBL; S66874; AAB28741.2; .
DR EMBL; S66868; AAB28741.2; JOINED.
DR EMBL; S66869; AAB28741.2; JOINED.
DR EMBL; S66870; AAB28741.2; JOINED.
DR EMBL; S66871; AAB28741.2; JOINED.
DR EMBL; S66872; AAB28741.2; JOINED.
DR EMBL; M29464; AAA39903.1; .
DR PIR; A37359; A37359.
DR HSSP; P01127; LPDG.
DR MGD; MGI:97527; pdgfa.
DR InterPro; IPR002400; GF_cysknot.
DR InterPro; IPR000072; PDGF.
DR Pfam; PF00341; PDGF; 1.
DR PRINTS; PR00438; GFCYSKNOT.
DR PRODOM; PD001629; PDGF; 1.
DR SMART; SM00141; PDGF; 1.
DR PROSITE; PS00249; PDGF_1; 1.
DR PROSITE; PS0278; PDGF_2; 1.
KW Glycoprotein; Mitogen; Growth factor; Platelet; Alternative splicing;
FT SIGNAL.
FT SIGNAL 1 20
FT PROPEP 21 86
FT CHAIN 87 211
FT SITE 158 162
FT DISULFID 96 140
FT DISULFID 129 177
FT DISULFID 133 179
FT DISULFID 132 123
FT DISULFID 132 132
FT CARBOHYD 134 134
FT VARSPLIC 194 196
FT VARSPLIC 197 211
FT CONFLICT 92 92
FT SEQUENCE 211 AA; 24043 MW; 48633DDE58EFA43 CRC64;

REMOVED BY PROTEOLYSIS.
PLATELET-DERIVED GROWTH FACTOR, A CHAIN.
RECEPTOR BINDING SITE (POTENTIAL).
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
INTERCHAIN.
INTERCHAIN.
N-LINKED (GLCNAC. . .).
GRP -> DVR (IN SHORT ISOFORM).
MISSING (IN SHORT ISOFORM).
RAH -> TRD (IN REF. 2).
SEQUENCE 211 AA; 24043 MW; 48633DDE58EFA43 CRC64;

REMOVED BY PROTEOLYSIS.
PLATELET-DERIVED GROWTH FACTOR, A CHAIN.
RECEPTOR BINDING SITE (POTENTIAL).
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
INTERCHAIN.
INTERCHAIN.
N-LINKED (GLCNAC. . .).
GRP -> DVR (IN SHORT ISOFORM).
MISSING (IN SHORT ISOFORM).
RAH -> TRD (IN REF. 2).
SEQUENCE 211 AA; 24043 MW; 48633DDE58EFA43 CRC64;

REMOVED BY PROTEOLYSIS.
PLATELET-DERIVED GROWTH FACTOR, A CHAIN.
RECEPTOR BINDING SITE (POTENTIAL).
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
INTERCHAIN.
INTERCHAIN.
N-LINKED (GLCNAC. . .).
GRP -> DVR (IN SHORT ISOFORM).
MISSING (IN SHORT ISOFORM).
RAH -> TRD (IN REF. 2).
SEQUENCE 211 AA; 24043 MW; 48633DDE58EFA43 CRC64;
```


GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:58:21 ; Search time 24.76 Seconds
(without alignments)
740.608 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345

Perfect score: 597

Sequence: 1 LITEVRLYCTPRNFSVSI.....DVALEHHEEDCVCRGSTGG 106

Scoring table:

BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 562222 seqs, 172994929 residues

Total number of hits satisfying chosen parameters: 562222

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

- 1: sp_archea.*
- 2: sp_bacteria.*
- 3: sp_fungi.*
- 4: sp_human.*
- 5: sp_invertebrate.*
- 6: sp_mammal.*
- 7: sp_mhc.*
- 8: sp_organelle.*
- 9: sp_phage.*
- 10: sp_plant.*
- 11: sp_rodent.*
- 12: sp_virus.*
- 13: sp_vertebrate.*
- 14: sp_unclassified.*
- 15: sp_rvirus.*
- 16: sp_bacteriap.*
- 17: sp_archeap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	597	100.0	345	4 Q9NRA1	Q9nra1 homo sapien
2	597	100.0	345	4 Q9UL22	Q9ul22 homo sapien
3	572	95.8	345	11 Q9QY71	Q9qy71 mus musculus
4	565	94.6	345	11 Q9JHV8	Q9jnv8 mus musculus
5	563	94.3	345	11 Q9EQX6	Q9eqx6 rattus norv
6	527	88.3	345	13 Q9I946	Q9i946 gallus gall
7	305.5	51.2	290	11 Q9DIL8	Q9dil8 mus musculus
8	305.5	51.2	364	4 Q9BWW5	Q9bww5 homo sapien
9	305.5	51.2	370	4 Q9GZP0	Q9gzp0 homo sapien
10	305.5	51.2	370	11 Q9BQT1	Q9bqt1 rattus norv
11	305.5	51.2	370	11 Q9Z5I7	Q9z5i7 mus musculus
12	180	30.2	34	11 Q99JMA	Q99jma mus musculus
13	117.5	19.7	326	11 Q91ZE4	Q91ze4 rattus norv
14	114.5	19.2	146	13 Q90X23	Q90x23 bothrops ia
15	108.5	18.2	148	13 Q42571	Q42571 xenopus lae
16	108.5	18.2	194	13 O42572	O42572 xenopus lae

17	105	17.6	185	4 Q15354	Q15354 homo sapien
18	105	17.6	210	6 Q29613	Q29613 felis silve
19	105	17.6	226	4 Q9UF23	Q9uf23 homo sapien
20	104.5	17.5	126	6 Q9BDP7	Q9bdp7 macaca mula
21	104.5	17.5	169	4 Q96NW5	Q96nw5 homo sapien
22	104.5	17.5	191	4 Q96L82	Q96l82 homo sapien
23	104.5	17.5	191	4 Q96KJ0	Q96kj0 homo sapien
24	104.5	17.5	191	6 Q95NE5	Q95ne5 macaca fasc
25	104	17.4	118	11 Q9CU96	Q9cu96 mus musculu
26	104	17.4	194	13 Q90WK1	Q90wk1 gallus gall
27	104	17.4	196	11 Q99L56	Q99l56 mus musculu
28	104	17.4	198	13 Q90WK3	Q90wk3 gallus gall
29	104	17.4	211	13 Q90WK2	Q90wk2 gallus gall
30	102.5	17.2	189	6 Q95LQ4	Q95lq4 felis silve
31	102	17.1	301	5 Q9VWP6	Q9vwp6 drosophila
32	102	17.1	314	5 Q9BLX1	Q9blx1 drosophila
33	102	17.1	325	5 Q960Z8	Q960z8 drosophila
34	101.5	17.0	118	6 Q9MZB1	Q9mzb1 ovis aries
35	101.5	17.0	124	6 Q9GK00	Q9gk00 callithrix
36	101.5	17.0	190	6 O77643	O77643 ovis aries
37	100.5	16.8	144	13 Q73822	Q73822 brachydanio
38	100.5	16.8	146	13 Q90X24	Q90x24 bothrops in
39	100.5	16.8	188	13 Q73682	Q73682 brachydanio
40	100.5	16.8	190	11 Q9QX39	Q9qx39 spalax leuc
41	100.5	16.8	326	11 Q91ZHE	Q91zh6 meriones un
42	99.5	16.7	415	11 Q91ZE3	Q91ze3 rattus norv
43	99.5	16.7	418	13 Q57352	Q57352 coturnix co
44	99.5	16.7	420	6 Q9XS50	Q9xs50 bos taurus
45	98	16.4	75	6 O18843	O18843 oryctolagus

ALIGNMENTS

RESULT 1

ID	Q9NRA1	PRELIMINARY;	PRT;	345 AA.
AC	Q9NRA1;			
DT	01-OCT-2000 (TREMBLrel. 15, Created)			
DT	01-OCT-2000 (TREMBLrel. 15, Last sequence update)			
DT	01-DEC-2001 (TREMBLrel. 19, Last annotation update)			
DE	PLATELET-DERIVED GROWTH FACTOR C.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=LUNG;			
RX	MEDLINE=20268201; PubMed=10806482;			
RA	Li X., Ponten A., Aase K., Karlsson L., Abramsson A., Uutela M.,			
RA	Backstrom G., Hellstrom M., Bostrom H., Li H., Soriano P.,			
RA	Betscholtz C., Heidin C.-H., Alitalo K., Ostman A., Eriksson U.,			
RT	"PDGF-C is a new protease-activated ligand for the PDGF alpha-			
RT	receptor."			
RL	Nat. Cell Biol. 2:302-309(2000).			
CC	-!- SIMILARITY: CONTAINS 1 CUB DOMAIN.			
DR	EMBL; AF244813; AAF80597.1; -			
DR	InterPro; IPR000859; CUB.			
DR	InterPro; IPR000072; PDGF.			
DR	Pfam; PF00431; CUB; 1.			
DR	Pfam; PF00341; PDGF; 1.			
DR	SMART; SM00042; CUB; 1.			
DR	SMART; SM00141; PDGF; 1.			
DR	PROSITE; PS01180; CUB; 1.			
DR	PROSITE; PS03278; PDGF; 2; 1.			
SQ	SEQUENCE 345 AA; 39043 MW; 590889CEA55CC5EA CRC64;			

Query Match 100.0%; Score 597; DB 4; Length 345;
Best Local Similarity 100.0%; Pred No. 2,7e-66;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 LLTEEVRLYSCTPRNFVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
Db 240 LLTEEVRLYSCTPRNFVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 299

QY 61 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 106
Db 300 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 345

RESULT 2
Q9UL22 PRELIMINARY; PRT; 345 AA.
AC Q9UL22;
DT 01-MAY-2000 (Tremblrel. 13, Created)
DT 01-MAY-2000 (Tremblrel. 13, Last sequence update)
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)
DE SECRETORY GROWTH FACTOR-LIKE PROTEIN FALLOTEIN (SPINAL CORD-DERIVED
DE GROWTH FACTOR) (PLATELET-DERIVED GROWTH FACTOR C).
GN HSCDGF OR PDGFC.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=UTERUS;
RA Tsai Y.-J., Lee R.K.K., Lin S.P.;
RT "Fallotein, a novel growth factor like gene identified in human
RT uterus.";
RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=BRAIN;
RX MEDLINE=20317014; PubMed=10858496;
RA Hamada T., Ui-Tei K., Miyata Y.;
RT "A novel gene derived from developing spinal cords, SCDGF, is a unique
RT member of the PDGF/VEGF family.";
RL FEBS Lett. 475:97-102(2000).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=21347863; PubMed=11297552;
RA Gilbertson D.G., Duff M.E., West J.W., Kelly J.D., Sheppard P.O.,
RA Hofstrand P.D., Gao Z., Shoemaker K., Bukowski T.R., Moore M.;
RA Feldhaus A.L., Humes J.M., Palmer T.E., Hart C.B.;
RT "Platelet-derived Growth Factor C (PDGF-C), a Novel Growth Factor That
RT Binds to PDGF alpha and beta Receptor.";
RL J. Biol. Chem. 276:27406-27414(2001).
CC -|- SIMILARITY: CONTAINS 1 CUB DOMAIN.
DR EMBL; AF091434; AAF00049.1; -.
DR EMBL; AB033931; BAB03266.1; -.
DR EMBL; AF260738; AAK51637.1; -.
DR InterPro: IPR000859; CUB.
DR Pfam; PF00431; CUB; 1.
DR Pfam; PF00341; PDGF; 1.
DR SMART; SM00042; CUB; 1.
DR SMART; SM00141; PDGF; 1.
DR PROSITE; PS01180; CUB; 1.
DR PROSITE; PS50278; PDGF_2; 1.
SQ SEQUENCE 345 AA; 39029 MW; CDE9E51F40633E78 CRC64;

Query Match 100.0%; Score 597; DB 4; Length 345;
Best Local Similarity 100.0%; Pred. No. 2,7e-66;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLTEEVRLYSCTPRNFVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
Db 240 LLTEEVRLYSCTPRNFVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 299

QY 61 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 106
Db 300 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 345
```

```
RESULT 3
Q9QY71 PRELIMINARY; PRT; 345 AA.
AC Q9QY71;
DT 01-MAY-2000 (Tremblrel. 13, Created)
DT 01-MAY-2000 (Tremblrel. 13, Last sequence update)
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)
DE FALLOTEIN (PLATELET-DERIVED GROWTH FACTOR C).
GN PDGFC.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=OVARY;
RA Tsai Y.-J., Lee R.K.-K., Chen Y.-H., Lin S.-P., Cheng W.T.-K.;
RT "cDNA cloning of fallotein from mouse ovary.";
RL Submitted (JAN-1999) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J;
RA Gao Z., Hart C., Piddington C., Sheppard P., Shoemaker K.,
RA Gilbertson D., West J., O'Hara P.J.;
RT "Platelet-derived growth factor C (PDGF-C), a novel growth factor that
RT binds to PDGF alpha receptor.";
RL Submitted (MAY-2000) to the EMBL/GenBank/DBJ databases.
CC -|- SIMILARITY: CONTAINS 1 CUB DOMAIN.
DR EMBL; AF117608; AAF22516.1; -.
DR EMBL; AF266467; AAK58566.1; -.
DR MGD; MGI:1859631; Pdgcfc.
DR InterPro: IPR000859; CUB.
DR InterPro: IPR000072; PDGF.
DR Pfam; PF00431; CUB; 1.
DR SMART; SM00042; CUB; 1.
DR SMART; SM00141; PDGF; 1.
DR PROSITE; PS01180; CUB; 1.
DR PROSITE; PS50278; PDGF_2; 1.
SQ SEQUENCE 345 AA; 38741 MW; 3A58A1F701B84EA2 CRC64;

Query Match 95.8%; Score 572; DB 11; Length 345;
Best Local Similarity 94.3%; Pred. No. 3.6e-63;
Matches 100; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

QY 1 LLTEEVRLYSCTPRNFVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
Db 240 LLKEEVKLYSCTPRNFVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPR 299

QY 61 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 106
Db 300 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGNAGG 345

RESULT 4
Q9JHV8 PRELIMINARY; PRT; 345 AA.
AC Q9JHV8;
DT 01-OCT-2000 (Tremblrel. 15, Created)
DT 01-OCT-2000 (Tremblrel. 15, Last sequence update)
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)
DE PLATELET-DERIVED GROWTH FACTOR C.
GN PDGFC.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=SWISS-WEBSTER/NIH;
RX MEDLINE=20417814; PubMed=10960785;
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RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schirml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Tovo-Oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohsaki S.,
RA Hayashizaki Y.,
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
CC -I- SIMILARITY: CONTAINS 1 CUB DOMAIN.
DR EMBL: AK003359; BAB22735.1; -;
DR MGD: MGI:1919035; 1110003109Rik.
DR InterPro: IPR000859; CUB.
DR InterPro: IPR000072; PDGF.
DR Pfam: PF00431; CUB; 1.
DR SMART: SM00042; CUB; 1.
DR SMART: SM00141; PDGF; 1.
DR PROSITE: PS01180; CUB; 1.
DR PROSITE: PS0278; PDGF; 2; 1.
DR PROSITE: PS0278; PDGF; 2; 1.
SQ SEQUENCE 290 AA; 33425 MW; 14214509E6717D4B CRC64;

Query Match 51.2%; Score 305.5; DB 11; Length 290;
Best Local Similarity 52.0%; Pred. No. 5.7e-30;
Matches 53; Conservative 16; Mismatches 30; Indels 3; Gaps 1;

QY 2 LTEEVLRYSCPTNFVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCQCVPK 61
DB 183 LNDVKRYSCPTNFVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCQCVPK 61

QY 62 VTKKYHEVLQLRP---KTGVRGLHLSLTDALEHHEECDCVC 100
DB 243 TVKKYHEVLQFEPGFKRRGAKAKMALVDIQLDHHERCDCIC 284

RESULT 8
Q9BWV5 ID Q9BWV5 PRELIMINARY; PRT; 364 AA.
AC Q9BWV5;
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE IRIS-EXPRESSED GROWTH FACTOR SHORT FORM.
GN IEGF.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=IRIS;
RA Wistow G.;
RT "Iris-expressed Growth Factor (IEGF).";
RL Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases.
CC -I- SIMILARITY: CONTAINS 1 CUB DOMAIN.
DR EMBL: AY027516; AAK20082.1; -;
DR InterPro: IPR000859; CUB.
DR InterPro: IPR000072; PDGF.
DR Pfam: PF00431; CUB; 1.
DR SMART: SM00042; CUB; 1.
DR SMART: SM00141; PDGF; 1.
DR PROSITE: PS01180; CUB; 1.
DR PROSITE: PS0278; PDGF; 2; 1.
DR PROSITE: PS00430; TONB_DEPENDENT_REC_1; UNKNOWN 1.
SQ SEQUENCE 364 AA; 42166 MW; 245C53E8DDEA5EAC CRC64;

Query Match 51.2%; Score 305.5; DB 4; Length 364;
Best Local Similarity 52.9%; Pred. No. 7.3e-30;
Matches 54; Conservative 13; Mismatches 32; Indels 3; Gaps 1;
QY 2 LTEEVLRYSCPTNFVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCQCVPK 61
DB 257 LNDVKRYSCPTNFVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCQCVPK 61
QY 62 VTKKYHEVLQLRP---KTGVRGLHLSLTDALEHHEECDCVC 100
DB 317 TVKKYHEVLQFEPGFKRRGAKAKMALVDIQLDHHERCDCIC 358

RESULT 9
Q9GZP0 ID Q9GZP0 PRELIMINARY; PRT; 370 AA.
AC Q9GZP0;
DT 01-MAR-2001 (TrEMBLrel. 16, Created)
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE SPINAL CORD-DERIVED GROWTH FACTOR-B (MSTP036) (IRIS-EXPRESSED GROWTH
DE FACTOR LONG FORM) (PLATELET-DERIVED GROWTH FACTOR D).
GN HSCDGF-B OR IEGF OR PDGFD.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Hamada T., Ui-Tel K., Imaki J., Miyata Y.;
RT "Molecular Cloning of SCDF-B, a Novel Growth Factor Homologous to
RT SCDFG/PDGF-C/Fallotelin.";
RL Biochem. Biophys. Res. Commun. 0:0-0(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=AORTA;
RA Liu B., Liu Y.Q., Wang X.Y., Zhao B., Sheng H., Zhao X.W., Liu S.,
RA Xu Y.Y., Ye J., Song L., Gao Y., Zhang C.L., Zhang J., Wei Y.J.,
RA Cao H.Q., Zhao Y., Liu L.S., Ding J.F., Gao R.L., Wu Q.Y., Qiang B.Q.,
RA Yuan J.G., Liew C.C., Zhao M.S., Hui R.T.;
RL Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=IRIS;
RA Wistow G.;
RT "Iris-expressed Growth Factor (IEGF).";
RL Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RX PubMed-11331881;
RA Bergsten E., Untela M., Li X., Pietras K., Ostman A., Heldin C.H.,
RA Allitalo K., Eriksson U.;
RT "PDGF-D is a specific, protease-activated ligand for the PDGF beta-
RT receptor.";
RL Nat. Cell Biol. 3:512-516(2001).
RN [5]
RP SEQUENCE FROM N.A.
RX PubMed-11331882;
RA LaRochelle W.J., Jeffers M., McDonald W.F., Chillakuru R.A.,
RA Giese N.A., Lokker N.A., Sullivan C., Boldog F.L., Yang M., Vernet C.,
RA Burgess C.E., Fernandez E., Deegler L.L., Rittman B., Shinkets J.,
RA Shinkets R.A., Rothberg J.M., Lichtenstein H.S.;
RT "PDGF D, A Novel Protease-Activated Growth Factor.";
RL Nat. Cell Biol. 3:517-521(2001).
CC -I- SIMILARITY: CONTAINS 1 CUB DOMAIN.
DR EMBL: AB033832; BAB18903.1; -;
DR EMBL: AF113216; AAK39287.1; -;
DR EMBL: AY027517; AAK20081.1; -;
DR EMBL: AF336376; AAK56136.1; -;
DR EMBL: AF335584; AAK38840.1; -;
DR InterPro: IPR000859; CUB.
DR InterPro: IPR000072; PDGF.
DR InterPro: IPR000531; TonB_boxC.

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DR Pfam: PF00431; CUB; 1.
DR SMART: SM00042; CUB; 1.
DR SMART: SM00141; PDGF; 1.
DR PROSITE: PS01180; CUB; 1.
DR PROSITE: PS0278; PDGF; 2; 1.
DR PROSITE: PS00430; TONRDEPENDENT_REC.1; UNKNOWN.1.
SQ SEQUENCE 370 AA; 42848 MW; D387F485E7BB7674 CRC64;

Query Match          51.2%; Score 305.5; DB 4; Length 370;
Best Local Similarity 52.9%; Pred. No. 7.4e-30;
Matches 54; Conservative 13; Mismatches 32; Indels 3; Gaps 1;

QY 2 LEEVRLYSCIPRNFVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQVPSK 61
DB 263 LNDVARYSCTPRNHSVNLREELKLTNAVFFPRCLLVQRCGCGGTNNWKSCTCSSGK 322

QY 62 VTKKYHEVLQLRP---KTGVRGLHLSLTDVALEHHEECDCVC 100
DB 323 TVKKYHEVLQFEGHFKRGRKAKMALVDIQLDHERCDCIC 364

RESULT 10
Q9EQT1 PRELIMINARY; PRT; 370 AA.
AC Q9EQT1
DT 01-MAR-2001 (Tremblrel. 16, Created)
DT 01-MAR-2001 (Tremblrel. 16, Last sequence update)
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)
DE SPINAL-CORD DERIVED GROWTH FACTOR-B.
GN RSCDGF-B.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21092670; PubMed=11162582;
RA Hamada T., Ui-Tei K., Inaki J., Miyata Y.;
RT "Molecular Cloning of SCDGF-B, a Novel Growth Factor Homologous to
SCDGF/PDGF-C/fallotelin.";
RL Biochem. Biophys. Res. Commun. 280:733-737(2001).
CC 1- SIMILARITY: CONTAINS 1 CUB DOMAIN.
DR EMBL: AB052170; BAB18920.1; -.
DR InterPro: IPR000859; CUB.
DR InterPro: IPR000072; PDGF.
DR Pfam: PF00431; CUB; 1.
DR SMART: SM00042; CUB; 1.
DR SMART: SM00141; PDGF; 1.
DR PROSITE: PS01180; CUB; 1.
DR PROSITE: PS0278; PDGF; 2; 1.
SQ SEQUENCE 370 AA; 42809 MW; 7B8A251F679BF73 CRC64;

Query Match          51.2%; Score 305.5; DB 11; Length 370;
Best Local Similarity 52.0%; Pred. No. 7.4e-30;
Matches 53; Conservative 16; Mismatches 30; Indels 3; Gaps 1;

QY 2 LEEVRLYSCIPRNFVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQVPSK 61
DB 263 LNDVARYSCTPRNHSVNLREELKLTNAVFFPRCLLVQRCGCGGTNNWKSCTCSSGK 322

QY 62 VTKKYHEVLQLRP---KTGVRGLHLSLTDVALEHHEECDCVC 100
DB 323 TVKKYHEVLQFEGHFKRGRKAKMALVDIQLDHERCDCIC 364

RESULT 11
Q925I7 PRELIMINARY; PRT; 370 AA.
ID Q925I7
AC Q925I7
DT 01-DEC-2001 (Tremblrel. 19, Created)
DT 01-DEC-2001 (Tremblrel. 19, Last sequence update)
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DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)
DE PLATELET-DERIVED GROWTH FACTOR D.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/C;
RX MEDLINE=21231380; PubMed=11331882;
RA Laroche W.J., Jeffers M., McDonald W.F., Chillakuru R.A.,
RA Giese N.A., Lokker N.A., Sullivan C., Boldog F.L., Yang M., Vernet C.,
RA Burgess C.E., Fernandez E., Deegler L.L., Rittman B., Shinkets J.,
RA Shinkets R.A., Rothenberg J.M., Lichenstein H.S.;
RT "PDGF D, A Novel Protease-Activated Growth Factor.";
RL Nat. Cell Biol. 3:517-521(2001).
DR EMBL: AF335583; AAK38839.1; -.
SQ SEQUENCE 370 AA; 42809 MW; 9E80B4CF6813BFBE CRC64;

Query Match          51.2%; Score 305.5; DB 11; Length 370;
Best Local Similarity 52.0%; Pred. No. 7.4e-30;
Matches 53; Conservative 16; Mismatches 30; Indels 3; Gaps 1;

QY 2 LEEVRLYSCIPRNFVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQVPSK 61
DB 263 LNDVARYSCTPRNHSVNLREELKLTNAVFFPRCLLVQRCGCGGTNNWKSCTCSSGK 322

QY 62 VTKKYHEVLQLRP---KTGVRGLHLSLTDVALEHHEECDCVC 100
DB 323 TVKKYHEVLQFEGHFKRGRKAKMALVDIQLDHERCDCIC 364

RESULT 12
Q99JM4 PRELIMINARY; PRT; 34 AA.
ID Q99JM4
AC Q99JM4
DT 01-JUN-2001 (Tremblrel. 17, Created)
DT 01-JUN-2001 (Tremblrel. 17, Last sequence update)
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)
DE SIMILAR TO PLATELET-DERIVED GROWTH FACTOR, C POLYPEPTIDE
DE (FRAGMENT).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=MAMMARY TUMOR. WAP-TGF ALPHA MODEL. 7 MONTHS OLD, GROSS
RC TISSUE.;
RA Strausberg R.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL: BC006027; AAH06027.1; -.
FT NON_TER 1
SQ SEQUENCE 34 AA; 3618 MW; F4AB6A3A414AED9E CRC64;

Query Match          30.2%; Score 180; DB 11; Length 34;
Best Local Similarity 91.2%; Pred. No. 2.7e-15;
Matches 31; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 73 RPKTGVRLHLSLTDVALEHHEECDCVCVRGSGTGG 106
DB 1 RPKTGVRLHLSLTDVALEHHEECDCVCVRGSGTGG 34

RESULT 13
Q91ZE4 PRELIMINARY; PRT; 326 AA.
ID Q91ZE4
AC Q91ZE4
DT 01-DEC-2001 (Tremblrel. 19, Created)
DT 01-DEC-2001 (Tremblrel. 19, Last sequence update)
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)
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DE VEGF-D.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=SPRAGUE-DAWLEY;
RA Kirkin V., Mazitschek R., Krishnan J., Steffen A., Waltenberger J.,
RA Pepper M.S., Giannis A., Sleeman J.P.;
RT "Characterization of indolinones which specifically inhibit VEGF-C and
RT VEGF-D-induced activation of VEGFR-3 but not VEGFR-2";
RL Eur. J. Biochem. 0:0-0(2001).
DR EMBL; AY032728; AAK96008.1; -;
SQ SEQUENCE 326 AA; 37106 MW; D7CAEBA6C9FAB87D CRC64;

Query Match 19.7%; Score 117.5; DB 11; Length 326;
Best Local Similarity 33.0%; Pred. No. 2e-06;
Matches 35; Conservative 15; Mismatches 41; Indels 15; Gaps 6;
QY 1 LLTEEVRLYSCTPRNFVSIREEL-KRTDTIFWPGCLLVKRCGNCACCLHNCNECCV- 58
Db 106 VIDEWQRTQSPRETCEVASELGKTTNFFKPCVNVFRCG---CC--NEESVCMN 160
QY 59 --PSKVTYKKHVLQRPKTVGRGLHKSGLDVALEHHEECDCVCRG 102
Db 161 TSTSYISKQLFEISV--PLTSV---PELVPVKIANHTGCKCLPTG 200

RESULT 14
O90X23 PRELIMINARY; PRT; 146 AA.
ID Q90X23
AC Q90X23;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE VASCULAR ENDOTHELIAL GROWTH FACTOR PRECURSOR.
OS Bothrops jararaca (Jararaca).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC Viperidae; Crotalinae; Bothrops.
OX NCBI_TaxID=8724;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=VENOM GLAND;
RX MEDLINE=21523945; PubMed=11517227;
RA Junqueira de Azevedo I.L.M., Farsky S.H.P., Oliveira M.L.S., Ho P.L.;
RT "Molecular Cloning and Expression of a Functional Snake Venom Vascular
RT Endothelium Growth Factor (VEGF) from the Bothrops insularis Pit
RT Viper. A New Member of the VEGF Family of Proteins.";
RL J. Biol. Chem. 276:39836-39842(2001).
DR EMBL; AY033152; AAK52103.1; -;
KW Signal.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 146 VASCULAR ENDOTHELIAL GROWTH FACTOR.
SQ SEQUENCE 146 AA; 16377 MW; 451EEF514EA9408E CRC64;

Query Match 19.2%; Score 114.5; DB 13; Length 146;
Best Local Similarity 31.1%; Pred. No. 2e-06;
Matches 33; Conservative 14; Mismatches 42; Indels 17; Gaps 6;
QY 5 EVRLYS-CTPRNFVSIREELK-RTDTIFWPGCLLVKRCGNCACCLHNCNECCVPSKV 62
Db 31 EVYRHVSCQPRETLVLSILEYDGEISHIFRPSCVTALRCGG---CCTDESLECTATGKRS 87
QY 63 TKYHVLQRPKTVGRGLHKSGLD---VALEHHEECDCVCRGSTG 105
Db 88 VGR--EIMRLSP-----HKGTSEVMQFTTEHTDCRCPRASG 124

RESULT 15

042571 PRELIMINARY; PRT; 148 AA.
ID 042571;
AC 042571;
DT 01-JAN-1998 (TrEMBLrel. 05, Created)
DT 01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE VASCULAR ENDOTHELIAL GROWTH FACTOR 122.
GN VEGF.
OS Xenopus laevis (African clawed frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidae; Pipidae;
OC Xenopodinae; Xenopus.
OX NCBI_TaxID=8355;
RN [1]
RP SEQUENCE FROM N.A.
RA Cleaver O., Tonissen K.F., Saha M.S., Krieg P.A.;
RT "Neovascularization of the Xenopus embryo.";
RL Dev. Dyn. 0:0-0(1997).
DR EMBL; AF008593; AAB63679.1; -;
DR HSSP; P15692; 1VPP.
DR InterPro; IPR000072; PDGF.
DR Pfam; PF00341; PDGF; 1.
DR ProDom; PD001629; PDGF; 1.
DR SMART; SM00141; PDGF; 1.
DR PROSITE; PS00249; PDGF_1; 1.
DR PROSITE; PS0278; PDGF_2; 1.
SQ SEQUENCE 148 AA; 17234 MW; 4AD153CA2F8B1E95 CRC64;

Query Match 18.2%; Score 108.5; DB 13; Length 148;
Best Local Similarity 25.8%; Pred. No. 1.1e-05;
Matches 23; Conservative 21; Mismatches 34; Indels 11; Gaps 4;
QY 11 CTPRNFVSIREEL-KRTDTIFWPGCLLVKRCGNCACCLHNCNECCVPSKVTKYHEV 69
Db 52 CQVREILVDIFQYDPDEVEIFRPSCVPLMRAG---CC--NDESLCVPTECYNTMQI 106
QY 70 LQLRPKTVGRGLHKSGLDVALEHHEECDC 98
Db 107 MKIKPH-----ISQHMDSFQHSQCEC 130

Search completed: May 24, 2002, 10:01:46
Job time: 205 sec

